Bradley Overhead Replacement and Widening

Merced County, California

District 10-Mer-140-KP 58.7/60.5 (PM 36.5/37.6)

10-0G1300/3A6600

Draft Environmental Impact Report/ Environmental Assessment and Section 4(f) Evaluation

Prepared by the
U.S. Department of Transportation
Federal Highway Administration
and the
State of California
Department of Transportation

October 2005

General Information About This Document

What's in this document?

The California Department of Transportation (Caltrans) and the Federal Highway Administration have prepared this Environmental Impact Report/Environmental Assessment, which examines the potential environmental impacts of the alternatives being considered for the proposed project located in Merced County, California. The document describes why the project is being proposed, alternatives for the project, the existing environment that could be affected by the project, the potential impacts from each of the alternatives, and the proposed avoidance, minimization and/or mitigation measures.

What should you do?

- Please read this Environmental Impact Report/Environmental Assessment. Additional copies of this document as well as the technical studies are available for review at the Caltrans district office at 1976 Dr. Martin Luther King Jr. Blvd. (Charter Way), Stockton, CA 95205 and the following libraries: Merced County Library Main Branch, 2100 O Street, Merced, CA 95340 and South Merced George Branch, 1345 West 4th Street, Merced, CA 95340.
- We welcome your comments. If you have any comments regarding the proposed project, please send your written comments to Caltrans by the deadline. In addition to circulating this document to the public, Caltrans is offering an opportunity to hold a public hearing regarding this project. Would you like a public hearing?
- Submit comments via U.S. mail to:

  Lance Brangham, Environmental Branch Chief
  Attention: David Farris
  Department of Transportation, Environmental Planning
  2015 East Shields Avenue, Suite 100
  Fresno, CA 93726-5308

- Submit comments via email to Lance_Brangham@dot.ca.gov.
- Submit comments by the deadline: .

What happens next?

After comments are received from the public and reviewing agencies, Caltrans and the Federal Highway Administration may: (1) give environmental approval to the proposed project, (2) do additional environmental studies, or (3) abandon the project. If the project is given environmental approval and funding is appropriated, Caltrans could design and construct all or part of the project.

For individuals with sensory disabilities, this document is available in Braille, large print, on audiocassette, or computer disk. To obtain a copy in one of these alternate formats, please call or write to Caltrans, Attn: Lance Brangham, San Joaquin Valley Analysis Branch, 2015 East Shields Avenue, Suite 100, Fresno CA 93726; (559) 243-8294 Voice, or use the California Relay Service TTY number, 1-800-735-2929.

SCH Number: 2001091137
10-Mer-140-KP 58.7/60.5
(PM 36.5/37.6)
10-0G1300/3A6600

On State Route 140 from Marthella Avenue to 0.26 kilometer east of Santa Fe Avenue

DRAFT ENVIRONMENTAL IMPACT REPORT/ENVIRONMENTAL ASSESSMENT and Section 4(f) Evaluation

Submitted Pursuant to: (State) Division 13, California Public Resources Code
(Federal) 42 USC 4332(2)(C) and 49 USC 303

U.S. DEPARTMENT OF TRANSPORTATION
Federal Highway Administration

THE STATE OF CALIFORNIA
Department of Transportation

6/13/05
Date of Approval

Kome Ajise
Kome Ajise
District Director
District 10
California Department of Transportation

10/20/05
Date of Approval

for Gene K. Fong
Division Administrator
Federal Highway Administration

Summary

Introduction

Caltrans and the Federal Highway Administration propose to improve State Route 140 in the City of Merced in Merced County. The project would improve 1.8 kilometers (1.1 miles) of State Route 140, widening the two-lane highway from Marthella Avenue to 0.26 kilometer (0.16 mile) east of Santa Fe Avenue, and replace the existing Bradley Overhead Bridge with a new structure. Both Baker Drive and Santa Fe Avenue would be realigned, and signals would be added at the intersections of State Route 140/Kelly Avenue and State Route 140/Santa Fe Avenue.

Purpose and Need

The purpose of the project on State Route 140 is to correct non-standard design features and alleviate local street traffic congestion by reducing vehicle delay at various local street intersections, improve safety and operations, improve pedestrian and non-motorized vehicle access, and accommodate future traffic demands in the project limits. These deficiencies would be corrected by replacing the existing bridge with a wider structure, widening the road in the project limits to three or five lanes (depending on the chosen alternative) and realigning local streets.

Project Alternatives

Two build alternatives—Alternative 1 and Alternative 2—and a no-build alternative are under consideration. The build alternatives would replace the existing Bradley Overhead Bridge with a new structure that has shoulders and sidewalks. Under both build alternatives, the existing continuous left-turn lane would remain and a continuous left-turn lane would be incorporated into the new Bradley Overhead Bridge. Traffic signals would be added at the intersections of State Route 140/Kelly Avenue and State Route 140/Santa Fe Avenue. Santa Fe Avenue and Baker Drive would be realigned. Sidewalks would be built along the north side of the highway, and drainage basins are proposed to accommodate additional runoff from the new roadway.

The proposed bridge design would require closing the current access to State Route 140 from the Sierra Portal Mobile Home Park entrance and the eastern exit of Joe Herb Park. A new access would be created for the mobile home park through Joe Herb Park just south and west of the existing entrance. Traffic circulation within the park would be modified with additional two-way traffic.

Alternative 1 would widen the existing two-lane highway to a four-lane highway with a continuous left-turn lane. The new Bradley Overhead Bridge would consist of four lanes with a continuous left-turn lane.

Alternative 2 would widen the existing two-lane roadway to a two-lane highway with a continuous left-turn lane. The new Bradley Overhead Bridge would consist of two lanes with a continuous left-turn lane.

The no-build alternative would keep the existing highway as it is and would not correct the design concerns, alleviate traffic congestion, or accommodate future traffic demands in the project area. The project alternatives are explained in detail in Chapter 1.

Environmental Impacts

Environmental studies determined that the project would result in:

- Demolition of the historic Bradley Overhead Bridge.
- Permanent removal of 0.98 hectares/2.43 acres and temporary disturbance of 0.28 hectare/0.70 acres of suitable San Joaquin kit fox habitat.
- Increase in noise levels at some locations.
- Change of access to Joe Herb Park, removal of vegetation and parking.
- Relocation of six businesses and five residences.

Potential environmental impacts are listed in Table S-1 *Summary of Potential Impacts from Alternatives* and are explained in detail in Chapter 2.

Public Circulation

A Draft Environmental Impact Report was prepared and circulated for comment from January 14, 2004 to February 28, 2004. As part of the public circulation period, a public hearing was held on January 28, 2004 and a subsequent community meeting was held on February 18, 2004. Following the circulation of the Draft Environmental Impact Report, the Federal Highway Administration determined that the preparation of an Environmental Assessment was necessary based on the impacts of the proposed project on the two Section 4(f) properties (Bradley Overhead Bridge and Joe Herb Park), impacts on business and residential properties, effects on habitat of the San Joaquin Valley kit fox and the realignment of the access to the mobile home park. This document—a Draft Environmental Impact Report/Environmental Assessment—is the result and is now in circulation for review and public comment.

After comments are received on this Draft Environmental Impact Report/ Environmental Assessment, the lead agencies will take actions regarding the environmental document: Caltrans will determine whether to certify the Environmental Impact Report and issue Findings and a Statement of Overriding Considerations and the Federal Highway Administration will decide whether to issue a Finding of No Significant Impact or require an Environmental Impact Statement.

The proposed project is a joint project by the California Department of Transportation and the Federal Highway Administration and is subject to state and federal environmental review requirements. Project documentation, therefore, has been prepared in compliance with both, the California Environmental Quality Act and the National Environmental Policy Act. Caltrans is the lead agency under the California Environmental Quality Act and the Federal Highway Administration is lead agency under the National Environmental Policy Act.

One of the primary differences between the National Environmental Policy Act and the California Environmental Quality Act is the way significance is determined. Under the National Environmental Policy Act, significance is used to determine whether an Environmental Impact Statement, or some lower level of documentation, will be required. The National Environmental Policy Act requires that an Environmental Impact Statement be prepared when the proposed federal action (the project) as a whole has the potential to "significantly affect the quality of the human environment." The determination of significance is based on context and intensity. Some impacts determined to be significant under the California Environmental Quality Act may not be of sufficient magnitude to be determined significant under the National Environmental Policy Act. Under the National Environmental Policy Act, once a decision is made regarding the need for an Environmental Impact Statement, it is the magnitude of the impact that is evaluated and no judgment of its individual significance is deemed important for the text. The National Environmental Policy Act does not require that a determination of significant impacts be stated in the environmental documents.

The California Environmental Quality Act, on the other hand, does require Caltrans to identify each "significant effect on the environment" resulting from the project and ways to mitigate each significant effect. If the project may have a significant effect on any environmental resource, then an Environmental Impact Report must be prepared. Each and every significant effect on the environment must be disclosed in the Environmental Impact Report and mitigated if feasible. In addition, the California

Environmental Quality Act Guidelines list a number of mandatory findings of significance, which also require the preparation of an Environmental Impact Report. There are no types of actions under the National Environmental Policy Act that parallel the findings of mandatory significance of the California Environmental Quality Act. Please see Chapter 3 of this document for a discussion regarding the effects of this project and California Environmental Quality Act significance.

As stated above, some impacts determined to be significant under the California Environmental Quality Act may not lead to a determination of significance under the National Environmental Policy Act. Because the National Environmental Policy Act is concerned with the significance of the project as a whole, it is quite often the case that a "lower level" document is prepared for the National Environmental Policy Act. One of the most common joint document types is an Environmental Assessment/ Environmental Impact Report (EA/EIR).

Table S-1 Summary of Major Potential Impacts From Alternatives

Potential Impact		Alternative 1	Alternative 2	No-Build Alternative
Impacts to Public Parks		Change of access to Joe Herb Park, removal of vegetation and parking	Change of access to Joe Herb Park, removal of vegetation and parking	No changes
Business Displacements		6	6	No changes
Housing Displacements		4	4	No changes
Right-of-way Impacts		21 parcels (including above displacements), 6.1 hectares/15.1 acres	17 parcels(including above displacements), 5.9 hectares/14.6 acres	No changes
Utility Service Relocation		Pacific Bell (SBC), Pacific Gas & Electric, City of Merced, Merced Irrigation District (MID), Level 3 and AT&T	Pacific Bell (SBC), Pacific Gas & Electric, City of Merced, Merced Irrigation District (MID), Level 3 and AT&T	No changes
Emergency Services		Improved emergency services	Improved emergency services	No changes
Consistency with the Merced General Plan		Consistent with city and county general plans	Consistent with city and county general plans	Not consistent with city and county general plans
Visual Quality		Trees would be removed	Trees would be removed	No changes
Cultural Resources		Removal of one historic resource (Bradley Overhead Bridge)	Removal of one historic resource (Bradley Overhead Bridge)	No changes
Water Quality		No long-term impacts	No long-term impacts	No changes
Biological Resources		0.98 hectare/2.43 acres of permanent impact and 0.28 hectare/0.70 acre temporary impact of San Joaquin kit fox habitat	0.98 hectare/2.43 acres of permanent impact and 0.28 hectare/0.70 acre temporary impact of San Joaquin kit fox habitat.	No changes
Air Quality		Does not worsen any existing conditions or create new violations	Does not worsen any existing conditions or create new violations	Congestion may cause air quality to worsen.
Hazardous Waste		Removal of potential asbestos and lead-based paint in soil	Removal of potential asbestos and lead-based paint in soil	No changes
Noise	**# of receptors (homes, businesses, etc.) experiencing elevated sound levels**	4 Recommendation of soundwall for one location	4 Recommendation of soundwall for one location	4 No soundwall

Table S-2 Anticipated Permits

Agency	Permit/Approval	Status
United States Fish and Wildlife Service	Section 7 Biological Opinion for San Joaquin kit fox	Biological Opinion was received January 12, 2005
State Historic Preservation Officer	Memorandum of Agreement (MOA)	MOA was signed __June 13, 2005
Burlington Northern & Santa Fe Railroad	Cooperative agreement for proposed work within the railroad right-of-way	Pending
California State Water Resources Control Board	Notice of Intent	To be submitted before construction
Regional Water Quality Control Board	Section 401 – Regional Water Quality Control Board Water Quality Certification	Pending
California State Water Resources Control Board	Section 402, National Pollutant Discharge Elimination System Statewide Storm Water Permit	Existing permit #CAS000003 (SWRCB No. 99-06-DWQ)
City of Merced and County of Merced	Cooperative Agreements for: • New traffic signals at the intersections of State Route 140/Kelly Avenue and State Route 140/Santa Fe Avenue. • Modification of existing traffic signal at Parsons Avenue. • Local road realignments at Baker Drive and Santa Fe Avenue. • Maintenance of the landscaping at the drainage basin and inside Joe Herb Park after one year of acceptance of construction completion. • Modified maintenance agreement for maintenance of traffic signals at local road intersections. • New local road access provided for Sierra Portal Mobile Home Park through Joe Herb Park (The ultimate cooperative agreement will be between City of Merced and the Sierra Portal Mobile Home Park).	Pending

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List of Abbreviated Terms

Caltrans	California Department of Transportation
CEQA	California Environmental Quality Act
dBA	Decibels measured on the A scale of a sound meter
FHWA	Federal Highway Administration
KP	kilometer post
Leq	1-hour A-weighted equivalent sound level
NEPA	National Environmental Policy Act
PM	post mile
PM-10	Particulate matter 10 microns or less in diameter
SR	State Route

Chapter 1 Proposed Project

1.1 Introduction

Caltrans and the Federal Highway Administration propose to improve State Route 140 in the City of Merced in Merced County (Figure 1). The project would improve 1.8 kilometers (1.1 miles) of State Route 140, widening the two-lane highway from Marthella Avenue to 0.26 kilometer (0.16 mile) east of Santa Fe Avenue (Figure 2), and replace the existing Bradley Overhead Bridge with a new structure.

Two build alternatives and a no-build alternative have been considered and are discussed in detail in Section 1.3 Project Alternatives.

The two build alternatives (Alternatives 1 and 2) have two different funding sources: the State Highways Operations and Protection Program and the State Transportation Improvement Program. To achieve the ultimate design of a four-lane roadway, funds from these two programs would be split as follows:

- The State Highway Operation and Protection Program would replace the existing bridge (three of five lanes to be built on the ultimate alignment), realign Baker Drive and Santa Fe Avenue, add traffic signals at the intersections of State Route 140/Kelly Avenue and State Route 140/Santa Fe Avenue and construct drainage basins.
- The State Transportation Improvement Program would provide funds for three additional lanes to complete the four-lane roadway, two through lanes and a two way left turn lane. Access for the mobile home park would also be provided.

The 2002 Transportation Concept Report (approved February 2002) for State Route 140 within the project limits proposes a four-lane highway with continuous left-turn lane and a Level of Service "D" by the year 2020. The 1992 District System Management Plan identifies the concept Level of Service for this roadway within the project area as "D." The proposed project is consistent with the Route Concept Report and the District System Management Plan.

The 2004 Regional Transportation Plan prepared by Merced County Association of Governments established a Level of Service "D" for State Route 140. The proposed project is consistent with the Regional Transportation Plan.

State Route 140 runs east and west, connecting Interstate 5 to Yosemite National Park. It enters Merced from the west at the intersection of 13th and V Street, crosses State Route 99, and then heads eastward along the Yosemite Parkway corridor. The two-lane highway serves local traffic as well as a high volume of traffic traveling to Yosemite National Park and other recreational areas in the Sierra. State Route 140 also serves the city of Gustine and the communities of Planada, Cathey's Valley, Mariposa, Midpines, Briceburg, and El Portal.

In the project area, State Route 140 is a two-lane highway with a continuous left-turn lane from Marthella Avenue to the beginning of the Bradley Overhead Bridge. A two-lane road with no shoulders goes over the bridge. The urban section, west of Bradley Overhead Bridge, has numerous driveways and local street accesses. Intersections with State Route 140 are at Marthella Avenue, Carol Avenue, East 21st Street, Parsons Avenue, Anderegg Avenue, Edwards Avenue, Kelly Avenue, Baker Drive, and Santa Fe Avenue. All intersections of State Route 140 with local roads are controlled by stop signs, including the Joe Herb Park entrance and exit, except for Parsons Avenue, which has traffic signals.

Since the late 1990s, design concept studies have been completed as a joint undertaking among Caltrans, the Federal Highway Administration, and local agencies. In 1999, a Project Development Team was established to develop a strategy to improve this segment of State Route 140. The 2002 Transportation Concept Report (approved February 2002) indicated Level of Service deficiencies would occur within the project limits in the next 20 years. As a result of increased congestion and anticipated traffic demands, this project became a priority with the Merced County Association of Governments.

A Draft Environmental Impact Report was prepared and circulated for comment from January 14, 2004 to February 28, 2004. After the Draft Environmental Impact Report was circulated for comment, the Federal Highway Administration determined that the preparation of an Environmental Assessment was necessary based on the impacts of the proposed project on the two Section 4(f) properties (Bradley Overhead Bridge and Joe Herb Park), impacts on business and/or residential properties, the required permanent easement to realign the access to the adjacent mobile home park and effects on San Joaquin Valley kit fox habitat. The resulting document—this Draft Environmental Impact Report/Environmental Assessment with Section 4(f) Evaluation—is now being circulated for comment, with the opportunity for another public hearing being offered.

1.2 Purpose and Need

1.2.1 Project Purpose

The purpose of the project is to:

- Correct non-standard design features.
- Alleviate local street traffic congestion, reduce vehicle delay at various local street intersections, and accommodate future traffic demands within the project limits.
- Improve safety and operations.
- Incorporate non-motorized and pedestrian features, such as sidewalks and a shared bikeway.

1.2.2 Project Need

1.2.2.1 Roadway Deficiencies

The Bradley Overhead Bridge was built in 1931 and does not meet current design standards. The non-standard features include the following:

- There are no shoulders on the bridge (Figure 3).
- The steel bridge railings do not meet current standards.
- The bridge lacks adequate stopping sight distance for Kelly Avenue and at the entrance/exit of Joe Herb Park.
- The incline at the top of the bridge limits views of the intersections at both ends of the structure (Figure 3).
- The existing vertical clearance from the bridge to the railroad tracks and the horizontal clearance between the bridge columns are non-standard.
- Baker Drive is less than 5 meters (16 feet) wide under the existing bridge because of the narrow space between the bridge columns, and it narrows from two lanes to one lane under the Bradley Overhead Bridge (Figure 4).
- There is insufficient transition, deceleration and storage length of the existing left-turn lane at the Santa Fe Avenue intersection.

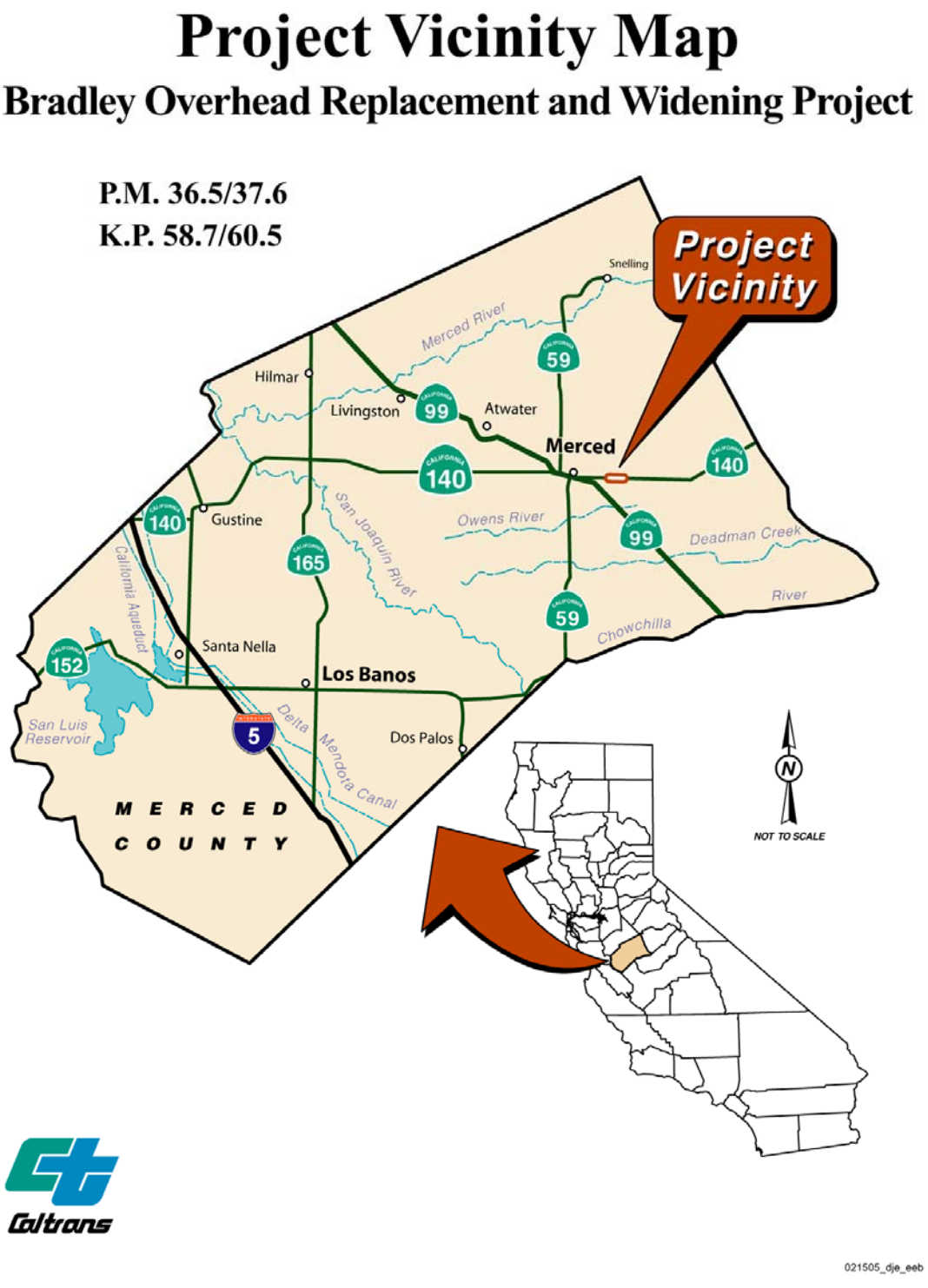


Figure 1 Project Vicinity Map

PROJECT LOCATION

SR 140 BRADLEY OVERHEAD REPLACEMENT AND WIDENING PROJECT

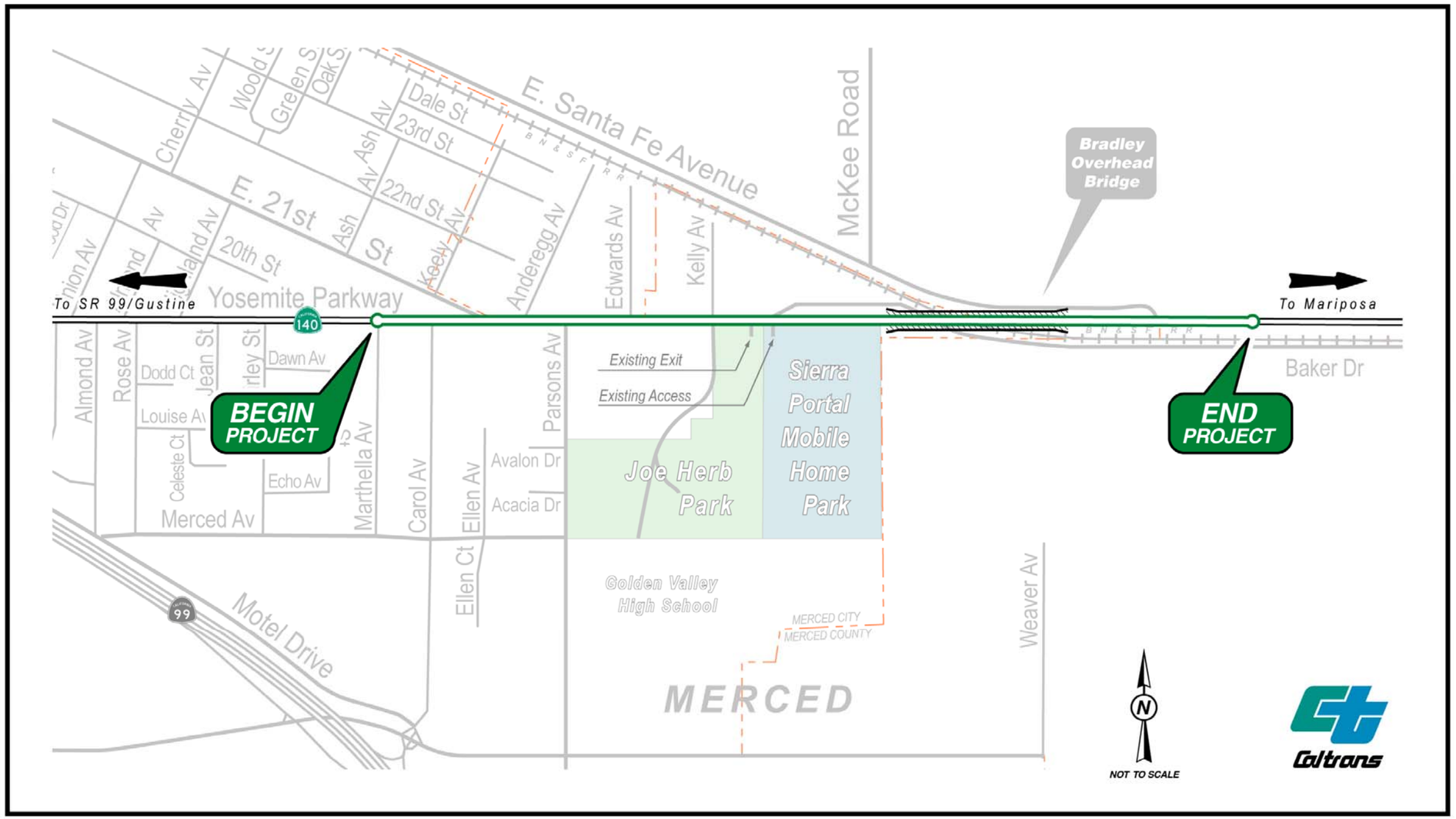


Figure 2 Project Location Map

Figure 3 The Bradley Overhead Bridge from the east showing the incline, lack of shoulders and sidewalks, and limited sight distance

Figure 4 Baker Drive crossing under the Bradley Overhead Bridge

1.2.2.2 Traffic Congestion

Level of Service is an indicator of driving conditions on a roadway or at an intersection and is defined in categories ranging from "A" to "F" (Figure 5). A Level of Service of "A" indicates free-flowing traffic with no hindrance to driving speed caused by traffic conditions. A Level of Service of "F" indicates substantial congestion with slow-moving, stop-and-go traffic. By 2027, the Level of Service on State Route 140 at Kelly and Santa Fe avenues is expected to reach "F."

The average daily traffic on State Route 140, within the project limits, is expected to increase by approximately 30 percent within 20 years. Table 1 shows the traffic on State Route 140 for the latest available year (2002) and projections for the construction year (2007) and design year (2027).

Table 1 Traffic Volumes on State Route 140

	East 21st to Parsons Avenue		Parsons Avenue to Kelly Avenue		Kelly Avenue to Santa Fe Avenue	
Year	**AADT**	**DHV**	**AADT**	**DHV**	**AADT**	**DHV**
2002	12,355	1,240	12,160	1,215	11,660	1,170
2007	13,335	1,340	13,085	1,310	12,555	1,250
2027	17,445	1,745	16,795	1,680	15,990	1,595

Source: Traffic Summary from Caltrans District 10 Traffic Forecasting and Analysis
AADT = Average Annual Daily Traffic (vehicles per day) denotes that the daily traffic is averaged over one year.
DHV = Daily Hourly Vehicles

The District 10 Office of Planning and Travel Forecasting & Analysis Branch prepared the forecast traffic data in Table 1. The Merced County Association of Governments year 2000 and 2025 traffic models were used to determine the traffic growth factor. However, the Merced County Association of Governments models do not contain all the links and zones needed to provide the details necessary for this project. Therefore, a one-percent growth factor was applied to provide traffic data for these locations. The existing conditions were validated with current on-site traffic counts and counts from the Caltrans Traffic Census Program.

Table 2 shows the existing and future (2027) Level of Service for intersections along State Route 140.

Table 2 Level of Service at Intersections

Level of Service along State Route 140						
Alternatives (year)	Local Street Intersections					
	21st Street	Anderegg Avenue	Parsons Avenue	Edwards Avenue	Kelly Avenue	Santa Fe Avenue
Existing (2000)	F	C	B	C	D	E
Alternative 1 (2027)	***-	C	B**	C	A**	B**
Alternative 2 (2027)	*-	*-	*-	D	B**	D**
No-Build Alternative	D[1]	E	F**	D	F	F

** Not included in Alternative 2, ** Intersections with traffic signals, *** Traffic signal not in project limits*

[1] *The improvement between the existing and future No-build LOS is based on the assumption that a traffic signal would be built at this location with a separate project.*

Vehicle delay is used as a criterion to measure Level of Service at the local street intersections (Figure 6). For intersections with stop signs, the delay indicates the average time a vehicle on the local street needs to wait before it can move onto State Route 140. At the intersections with traffic signals, the delay represents the overall average delay for all the legs approaching the intersection (Figure 7).

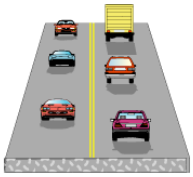
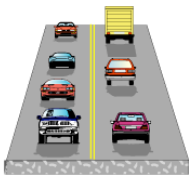
Traffic congestion and delay would occur at local street intersections, such as Anderegg Avenue, Kelly Avenue and Santa Fe Avenue, due to heavy traffic volumes on State Route 140 if no improvements were implemented in the future (year 2027). The Level of Service at these intersections would vary from "E" to "F."

1.2.2.3 Traffic Safety

In the most recent three-year period, the Traffic Accident Surveillance and Analysis System (TASAS) "Table B" report showed 36 reported accidents (0-fatal, 19-injury) within the project limits. The type of collisions were Hit Object (3), Sideswipe (4), Rear End (7), Broadside (16), Head-on (2), Auto vs. Pedestrian (1) and Other (3). The Actual Total Accident Rate is below the Statewide Average Total for this area. The Fatal + Injury rate is slightly higher than the average rate for similar locations. Table 3 summarizes the accident rate breakdown for the three-year period from January 1, 2000 to December 31, 2002. This project is expected to reduce accidents in the project limits.

LEVELS OF SERVICE

for Two-Lane Highways

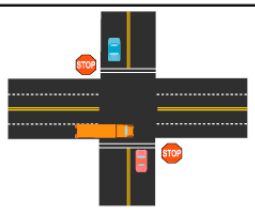
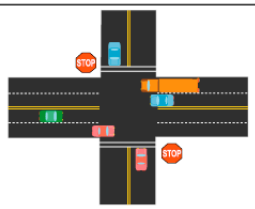
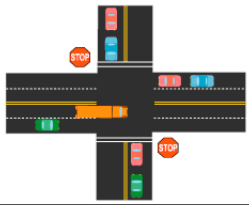
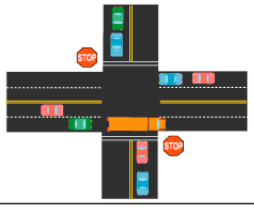
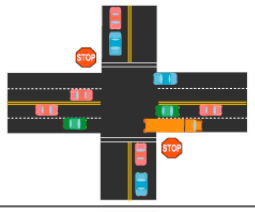
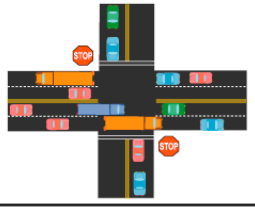
Level of Service	Flow Conditions	Operating Speed (mph)	Technical Descriptions
A		55+	Highest quality of service. Free traffic flow with few restrictions on maneuverability or speed. **No delays**
B		50	Stable traffic flow. Speed becoming slightly restricted. Low restriction on maneuverability. **No delays**
C		45	Stable traffic flow, but less freedom to select speed, change lanes or pass. **Minimal delays**
D		40	Traffic flow becoming unstable. Speeds subject to sudden change. Passing is difficult. **Minimal delays**
E		35	Unstable traffic flow. Speeds change quickly and maneuverability is low. **Significant delays**
F			Heavily congested traffic. Demand exceeds capacity and speeds vary greatly. **Considerable delays**

Source: 2000 HCM, Exhibit 20-2, LOS Criteria for Two-Lane Highways in Class 1

Figure 5 Level of Service for Two-Lane Highway

LEVELS OF SERVICE

for Two-Way Stop Intersections

Level of Service	Flow Conditions	Delay per Vehicle (seconds)	Technical Descriptions
A		≤10	Very short delays
B		11-15	Short delays
C		16-25	Minimal delays
D		26-35	Minimal delays
E		36-50	Significant delays
F		>50	Considerable delays

Source: 2000 HCM, Exhibit 17-2, Level of Service Criteria for TWSC Intersections

Figure 6 Level of Service for Intersections with No Signals

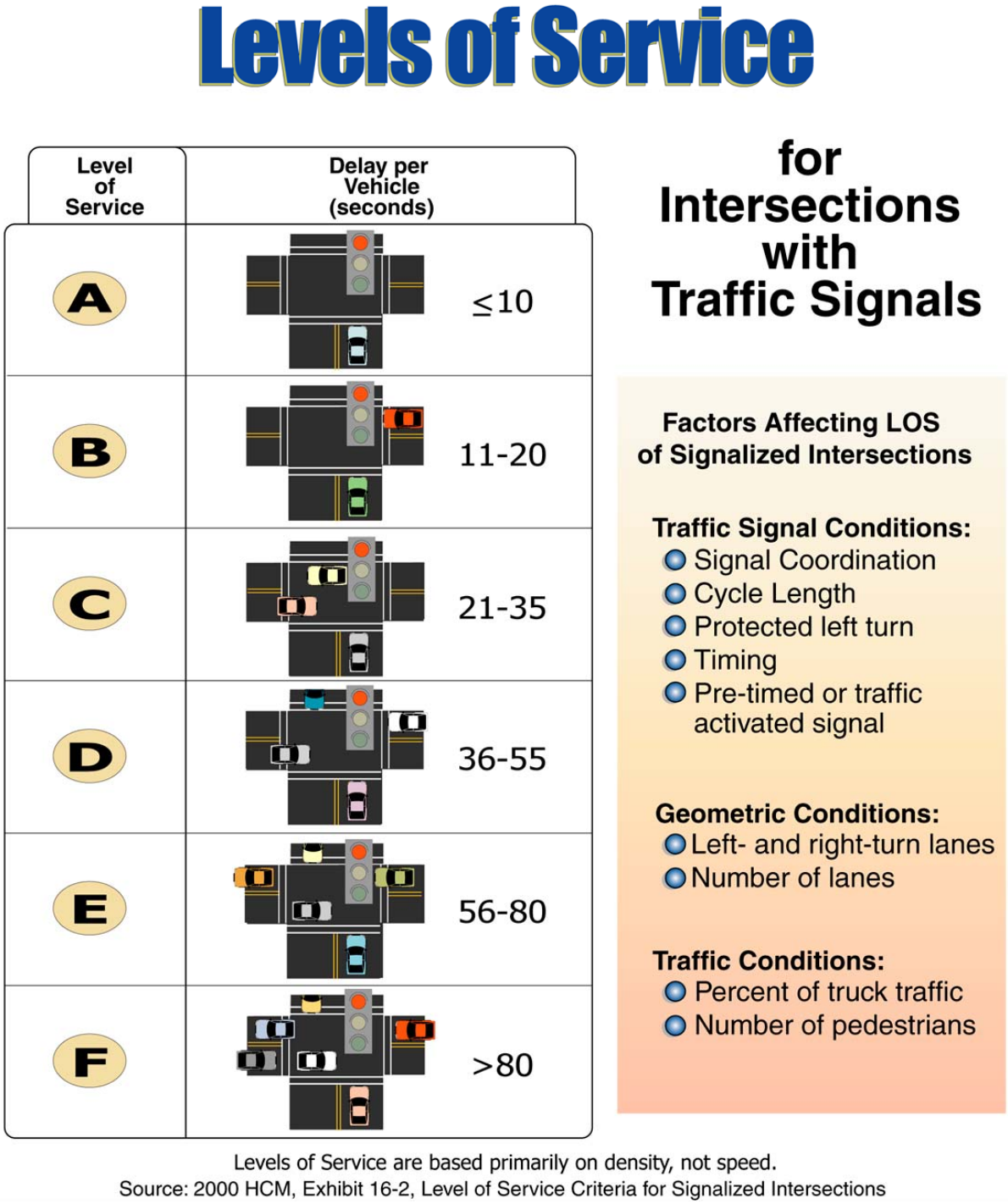


Figure 7 Level of Service for Intersections with Signals

Table 3 Accident Data

Accident Rate along State Route 140					
Actual			State Average		
Fatal	Fatal + Injury	Total	Fatal	Fatal + Injury	Total
0	1.53	2.9	0.017	1.48	3.64

1.2.3 Bicycle and Pedestrian Features

Within the project limits, land uses for property adjacent to State Route 140 include churches, a city park, an apartment complex, and commercial buildings, mixed with residential, recreational, commercial, and agricultural uses and a mobile home park. The Burlington Northern & Santa Fe Railroad tracks physically separate the east and west sides of the community. Currently, there are no sidewalks or bicycle facilities available on the Bradley Overhead Bridge. Incorporating pedestrian sidewalks and bikeways into this project would facilitate movement of local residents within the community and would be consistent with the proposed Draft Merced County Regional Commuter Bicycle Plan.

1.3 Project Alternatives

This section describes the proposed project and the design alternatives that were developed by a multi-disciplinary team to achieve the project purpose and need while avoiding or minimizing environmental impacts.

1.3.1 Alternative Development Process

Alternatives that would improve non-standard design features, reduce traffic congestion, accommodate future traffic, add non-motorized and pedestrian features, and provide a roadway that is consistent with state and regional planning along State Route 140 were evaluated. Two build alternatives—Alternatives 1 and 2—and a No-Build Alternative were developed for consideration.

1.3.2 Project Alternatives

Final selection of an alternative will not be made until after the evaluation of environmental impacts, consideration of public comments, and approval of the final environmental document.

1.3.2.1 Common Features of the Build Alternatives

Both build alternatives (Figure 8) would do the following:

- Demolish the existing Bradley Overhead Bridge.
- Construct a new Bradley Overhead Bridge, which would meet current design standards, provide the required vertical clearance for the Burlington Northern & Santa Fe Railroad tracks, provide the required horizontal clearance for Baker Drive, and include retaining walls to minimize right-of-way impacts.
- Realign Baker Drive to a "T' intersection with Kelly Avenue north of State Route 140.
- Realign Santa Fe Avenue to enhance traffic movement to and from State Route 140.
- Build sidewalks along the north side of the highway.
- Create drainage basins adjacent and north of State Route 140 to address additional runoff from the new roadway.
- Place a soundwall on top of the safety barrier on the south side of the Bradley Overhead Bridge.
- Incorporate a continuous left-turn lane into the new Bradley Overhead Bridge and maintain the existing continuous left-turn lane on State Route 140.
- Realign Baker Drive and Santa Fe Avenue.
- Add traffic signals at the Kelly Avenue intersection and the Santa Fe Avenue intersection with State Route 140.
- Close existing access to the mobile home park and create new access through Joe Herb Park.
- Implement access control along State Route 140 between Kelly Avenue and Santa Fe Avenue.

The proposed bridge design would require closing the current access to State Route 140 from the Sierra Portal Mobile Home Park entrance and the eastern exit of Joe Herb Park. A new access would be created for the mobile home park just south and west of the existing entrance through Joe Herb Park. Traffic circulation and facilities in the park would be modified with additional two-way traffic.

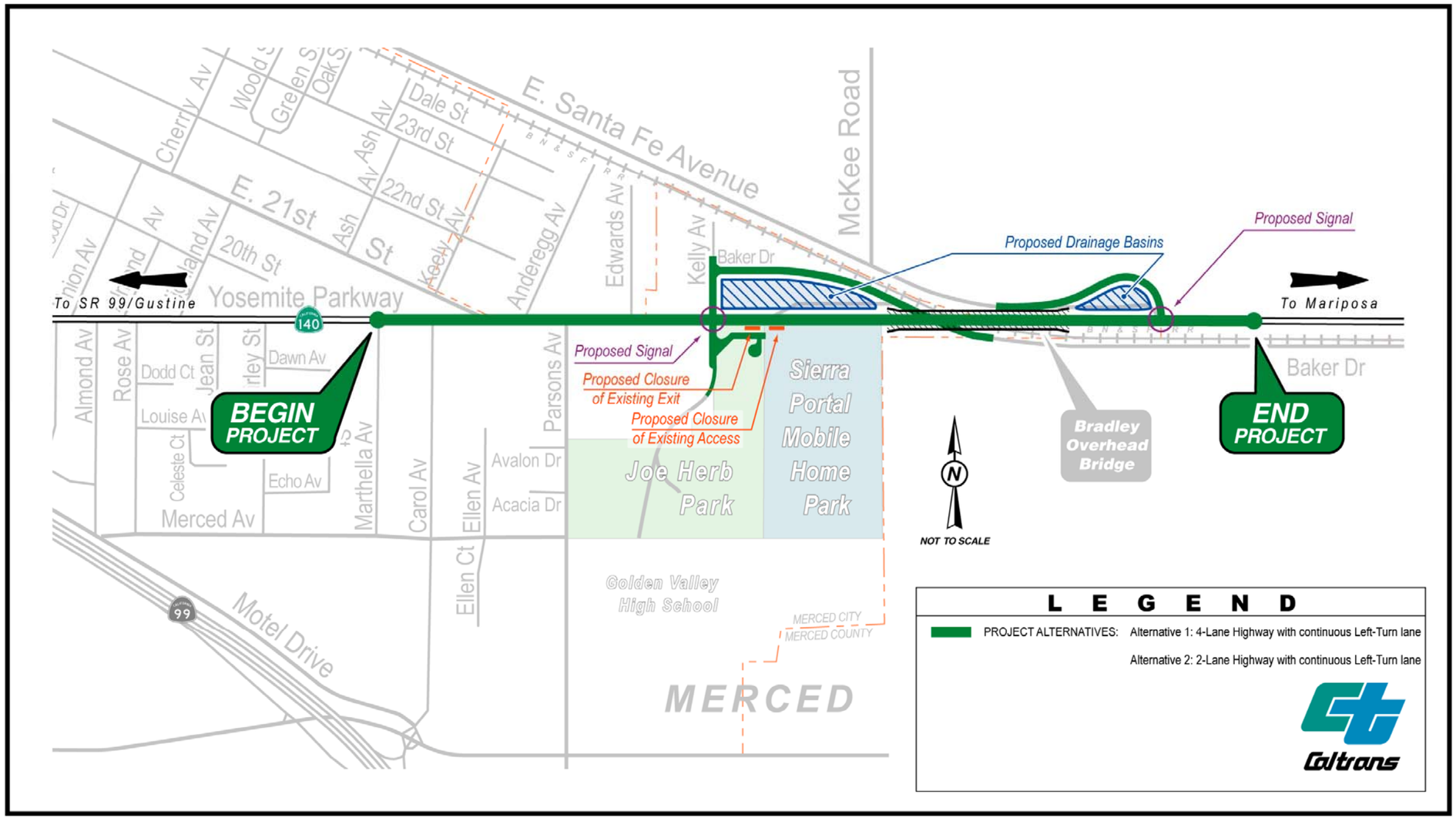


Figure 8 Proposed Alternatives

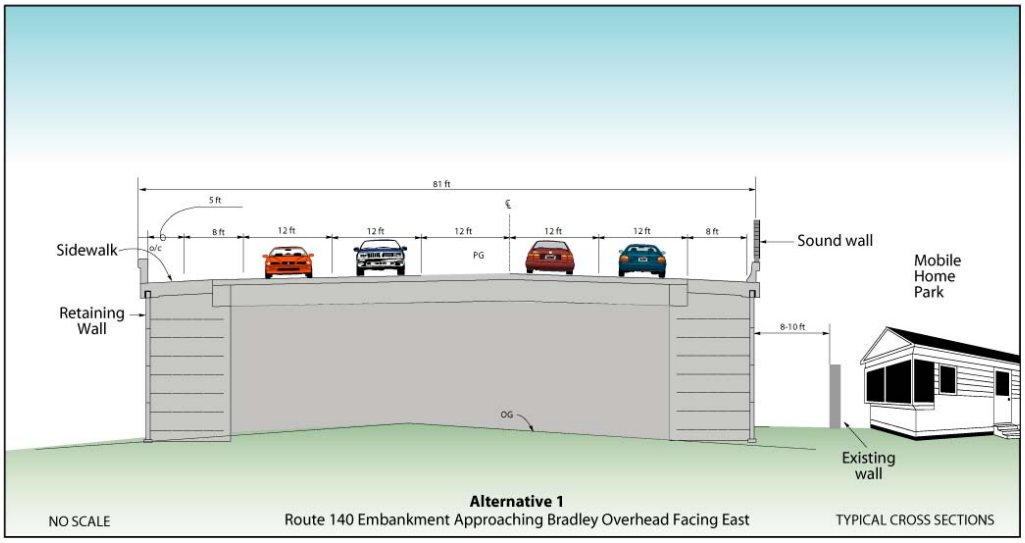
1.3.2.2 Unique Features of Build Alternative 1

Alternative 1 proposes to widen the existing two-lane highway to a four-lane highway with a continuous left-turn lane from Marthella Avenue to Santa Fe Avenue (Figure 9). The new Bradley Overhead Bridge would consist of four lanes with a continuous left-turn lane (Figure 10). The existing highway would be widened to the north (on the north side of the existing alignment).

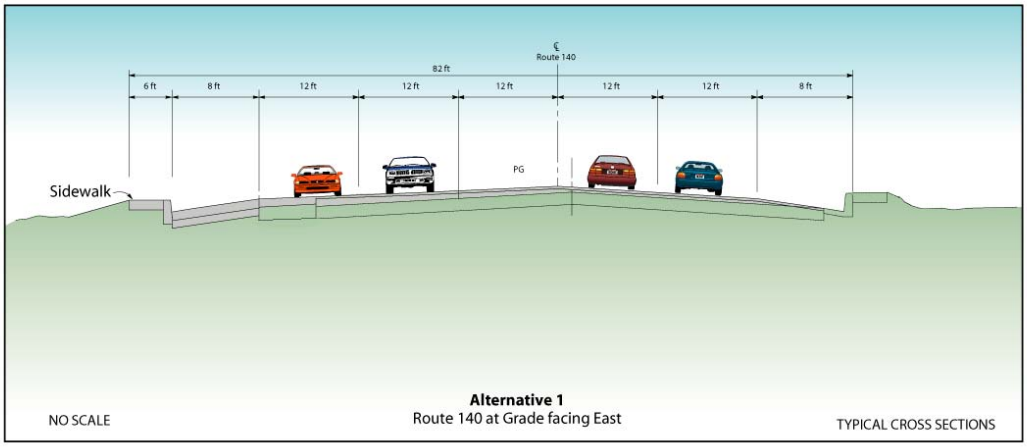
New intersections with traffic signals would be placed at Kelly Avenue/State Route 140 and Santa Fe Avenue/State Route 140. The existing intersection with traffic signals at Parsons Avenue/State Route 140 would be modified to accommodate a four-lane roadway. Since Parsons Avenue is a designated truck route through the City of Merced, the intersection would be designed to accommodate turns made by large trucks.

The projected Levels of Service for local street intersections under Alternative 1 are shown in Table 2 under Section 1.2.2.2.

The current (2004) estimated cost for Alternative 1 is $35,413,000, which consists of as $6,242,000 for right-of-way and $29,171,000 for construction.



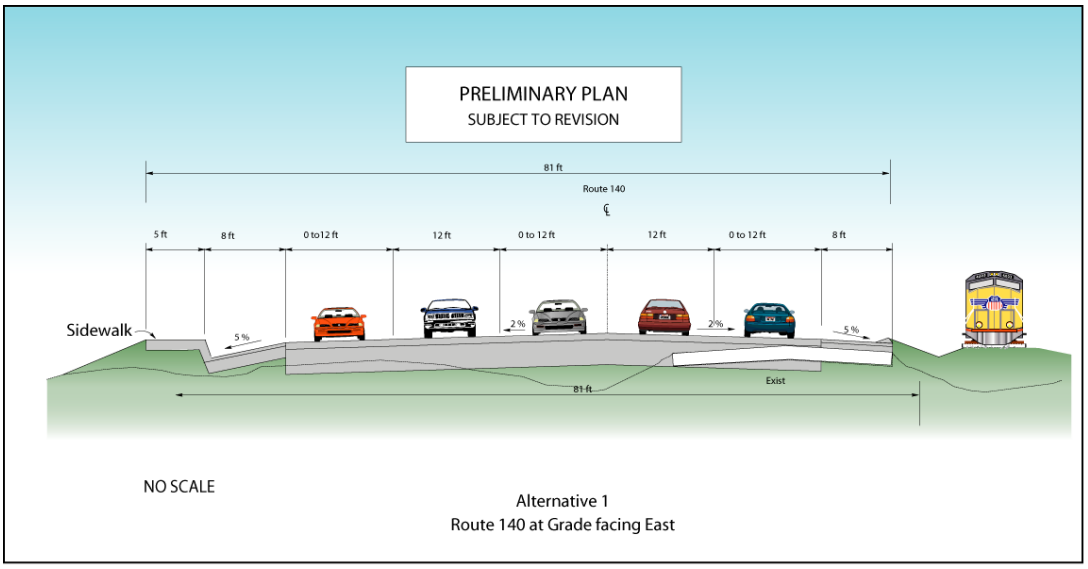
Proposed Route 140 from Kelly Ave. to the Beginning of the Bridge and from the End of the Bridge at Santa Fe Ave.



From Beginning of the Project to Kelly Ave.

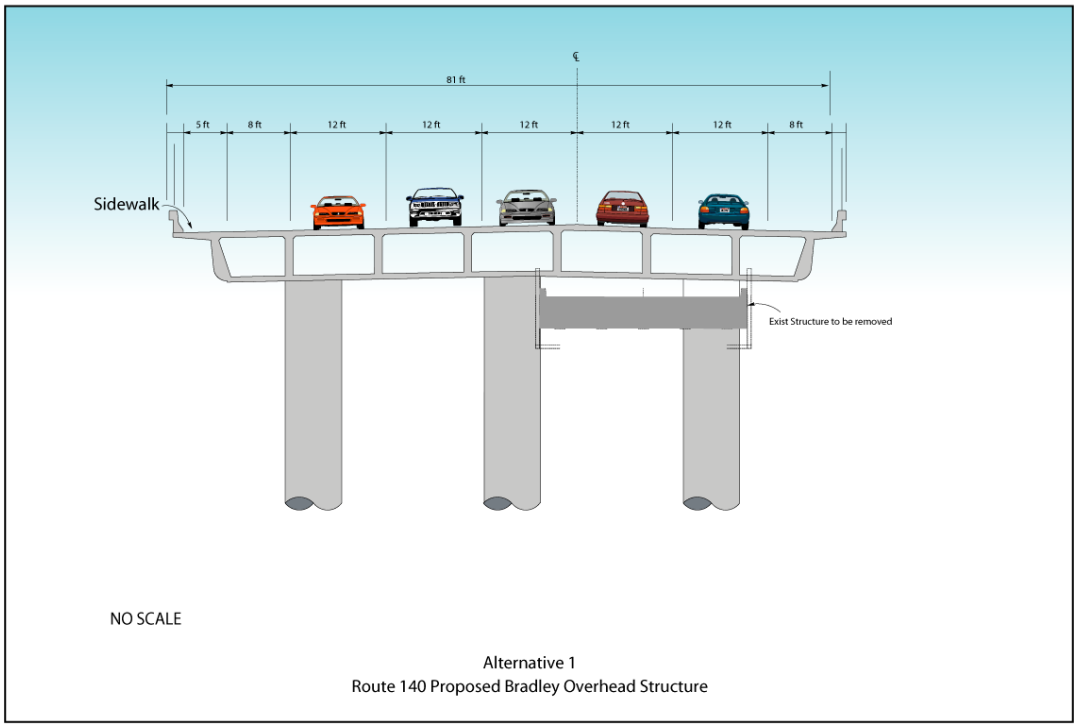
OG = Original Ground CL= Center Line PG= Profile Grade

Figure 9 Typical Cross-Section 1 – Alternative 1



Proposed Route 140 from Santa Fe Ave.
To the End of the Project

TYPICAL CROSS SECTIONS



TYPICAL CROSS SECTIONS

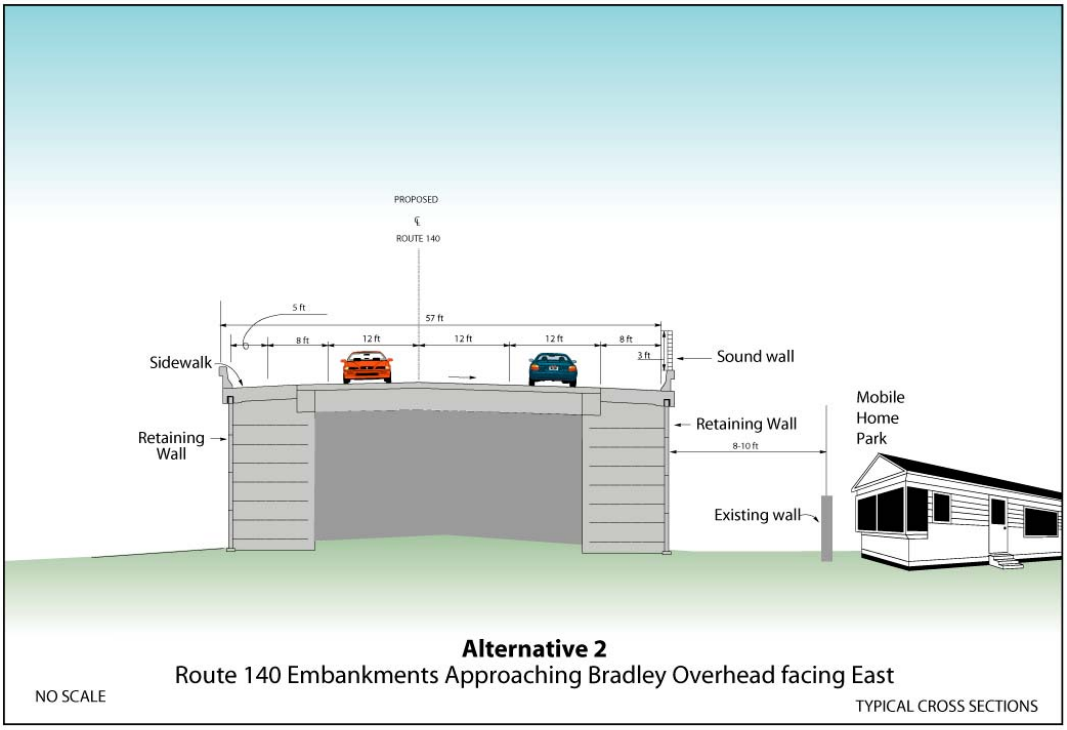
Figure 10 Typical Cross-Section 2, Alternative 1

1.3.2.3 Unique Features of Build Alternative 2

Alternative 2 proposes to widen the existing two-lane highway to a two-lane highway with a continuous left-turn lane from Edwards Avenue to east of Santa Fe Avenue. The new Bradley Overhead Bridge would consist of two lanes with a continuous left-turn lane. The modifications to the existing highway would be done to the north (on the north side of the existing alignment) (Figures 11 and 12).

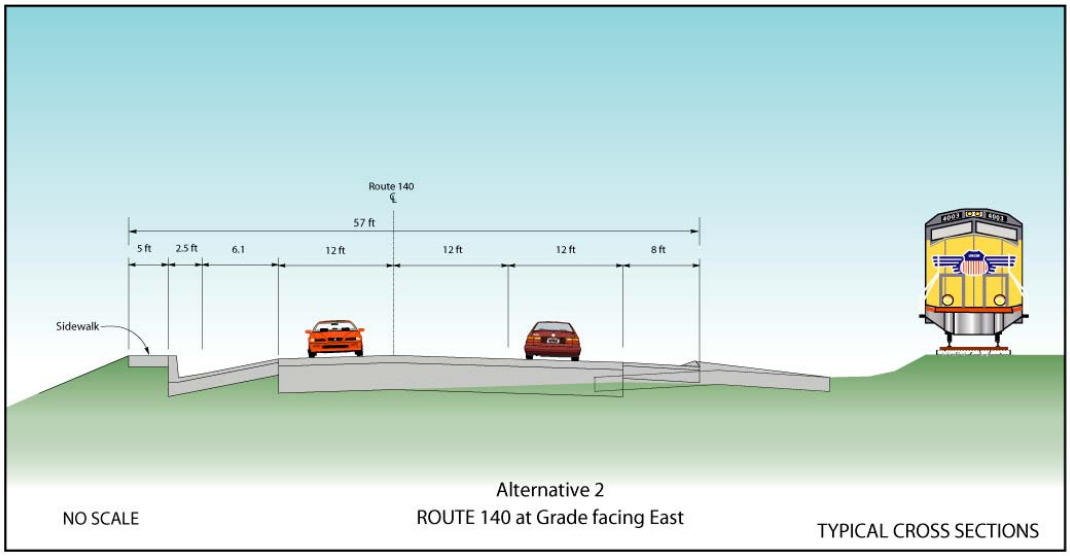
Table 2 shows the projected Level of Service for local street intersections under Section 1.2.2.2.

The current (2004) estimated cost for Alternative 2 is $28,514,000, which consists of as $6,193,000 for right-of-way and $22,321,000 for construction.



From Kelly Ave. to Beginning of the Bridge
and from the End of the Bridge to Santa Fe Ave.

Figure 11 Typical Cross-Section 1, Alternative 2



From Santa Fe Avenue to the End of the Project

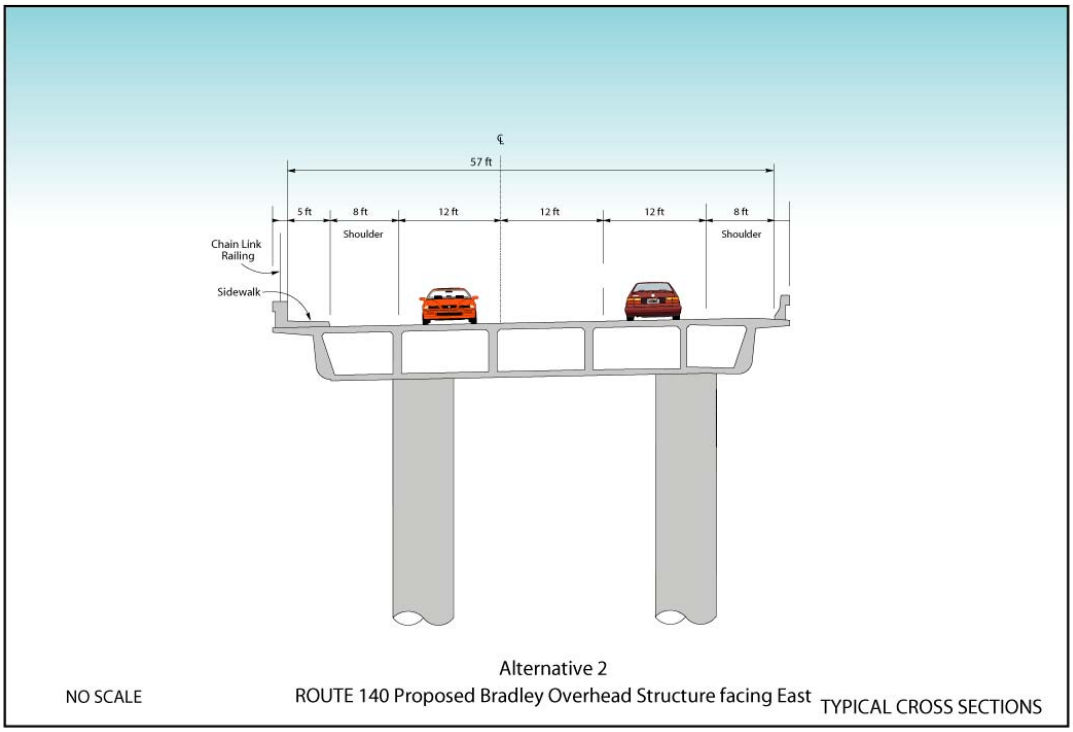


Figure 12 Typical Cross-Section 2, Alternative 2

1.3.3 Transportation Systems Management and Transportation Demand Management Alternatives

Transportation Systems Management considers operational improvements to satisfy the purpose and need of the project, with the focus on using the existing transportation systems and roadways more efficiently. Examples include the use of auxiliary lanes, turn lanes, reversible lanes, traffic signal coordination, ridesharing, and alternate modes of transportation.

To mitigate the impacts on all capacity-increasing projects, which include but are not limited to projects with lane additions such as the Bradley Overhead Replacement and Widening project, a Park and Ride facility should be considered and evaluated. Presently, there are no Park and Ride facilities along State Route 140 in Merced County. A Park and Ride facility in the vicinity of this project would be an integral part of other Transportation Control Measures designed to reduce vehicle miles traveled, thereby reducing congestion and motor vehicle emissions. A Park and Ride facility for this location has been identified in the District 10 Park and Ride Plan (draft) and recommended by the Park and Ride Coordinator. A letter from the City of Merced dated April 1, 2004 was received confirming that the existing Transpo Center facility on 16th Street can be used as a Park and Ride facility.

After a review of the Transpo Center parking lot on November 21, 2003 by the Park and Ride Coordinator, it was determined that this location is adequate for Park and Ride use. Signage at State Route 99 would be necessary to guide Park and Ride users to the Transpo Center. In addition, Park and Ride signage must be installed in the Transpo Center parking lot. An agreement is needed to allocate an adequate number of parking spaces for this project.

Although Transportation Systems Management measures alone could not satisfy the purpose and need of the project, the following Transportation Systems Management measures have been incorporated into the build alternatives for this project:

- A pedestrian sidewalk would be provided along the north side of State Route 140, including the new Bradley Overhead Bridge, to facilitate movement of local residents.
- Shoulders to accommodate bicyclists crossing the bridge structure would be provided. On-street parking would be restricted to allow a Class II Bikeway on the shoulders area.
- Park and Ride facility (as discussed above).

1.3.4 The No-Build Alternative

The No-Build Alternative would leave the existing roadway and bridge as they are with non-standard sight distance, horizontal and vertical clearances. If the existing highway remains unimproved, the Level of Service would further deteriorate during peak hours, worsening congestion and increasing travel time for commuters. Operational deficiencies would continue to exist. Accident rates would increase, and no sidewalks or shoulders would be built to accommodate bicyclists. The No-Build Alternative is not consistent with local and regional planning. This alternative, therefore, does not meet the purpose and need for the project.

1.4 Comparison of Alternatives

Criteria used to evaluate alternatives include project purpose and need issues, project cost and potential environmental effects of each build alternative. For most evaluation criteria, the two build alternatives are similar. Both alternatives would relieve traffic congestion, increase safety by improving sight distance and replace the existing non-standard structure with a bridge meeting current design standards.

Alternative 1 would widen the existing two-lane highway to a four-lane highway with a continuous left-turn lane. The new Bradley Overhead Bridge would consist of four lanes plus a continuous left-turn lane in the median. The estimated cost for Alternative 1 would be $35,413,000 (year 2004).

Alternative 2 would widen the existing two-lane roadway to a two-lane highway with a continuous left-turn lane. The new Bradley Overhead Bridge would consist of two lanes plus a continuous left-turn lane in the median. The estimated cost for Alternative 2 would be $28,514,000 (year 2004).

The No-Build Alternative would keep the existing highway as it is and would not correct the design concerns, alleviate traffic congestion, or accommodate future traffic demands in the project area.

Both build alternatives would meet the purpose and need of the project and would have similar environmental impacts on business and housing relocations and noise impacts (see Table S-1 Summary of Major Potential Impacts From Alternatives). Both alternatives would also remove the historic bridge. Alternative 1 would require more additional right-of-way (15.1 acres/6.1 hectares) than Alternative 2 (14.6 acres/ 5.9 hectares). In addition, Alternative 1 would affect more properties (21 vs. 17).

However, the projected Level of Service for local streets within the project for the design year 2027 would be better for Alternative 1.

After the public circulation period for this document, all comments will be considered and Caltrans and the Federal Highway Administration will select a preferred alternative and make the final determination of the project's effect on the environment. In accordance with the California Environmental Quality Act, Caltrans will certify that the project complies with the California Environmental Quality Act, prepare findings for all significant impacts identified, prepare a Statement of Overriding Considerations for impacts that will not be mitigated below a level of significance, and certify that the Findings and Statement of Overriding Considerations have been considered prior to project approval. Caltrans will then file a Notice of Determination with the State Clearinghouse that will identify whether the project will have significant impacts, mitigation measures were included as conditions of project approval, findings were made, and a Statement of Overriding Considerations was adopted. Similarly, if the Federal Highway Administration determines the action does not significantly affect the environment, it will issue a Finding of No Significant Impact in accordance with the National Environmental Policy Act.

1.5 Environmentally Superior Alternative

Both build alternatives have similar environmental impacts. Either alternative would displace the same number of businesses and residents, create similar noise impacts, affect the same acreage of kit fox habitat and have the same impact (replacement) to a historic resource (Bradley Overhead Bridge). Alternative 1 would require more additional right-of-way (15.1 acres/6.1 hectares) than Alternative 2 (14.6 acres/ 5.9 hectares). In addition, Alternative 1 would affect more properties (21 vs. 17).

However, the projected Level of Service for local streets within the project area for the design year 2027 would be better for Alternative 1, therefore reducing the likelihood for a future widening project and avoiding future interruptions to traffic and residents. In addition, future cost would be avoided by building a structure that would accommodate traffic beyond the 25-year design horizon. Therefore, Alternative 1 is considered the environmentally superior alternative.

1.6 Alternatives Considered and Withdrawn

Other alternatives were studied, but withdrawn for the reasons summarized below.

1.6.1 Four-Lane Northern Alignment

This alternative proposed a four-lane roadway adjacent to and north of the existing alignment. A new five-lane bridge would be approximately 15 meters (49 feet) north of the existing overhead. Similar to Alternative 1, this alternative would have a continuous left-turn lane throughout the entire project limits, intersections with traffic signals, realigned local roads, and drainage basins. In addition to the right-of-way required by Alternative 1, the Four-Lane Northern Alignment would require right-of-way between Parsons Avenue and Kelly Avenue for the transition to the existing roadway. These parcels contain a church, an apartment complex, and several businesses. The displacement of buildings and people would result in a greater impact to the community and increased project costs. Therefore, this alternative was withdrawn from further consideration.

1.6.2 Southern Alternative

The Southern Alternative proposed to realign State Route 140 to the south of the existing alignment. The alignment would run through the northeastern end of the mobile home park and residential parcels located south of the existing Baker Drive alignment. The new alignment would then tie back to the existing State Route 140 alignment east of Santa Fe Avenue. This alternative was not considered viable because it would remove at least 15 residential units from the senior-only Sierra Portal Mobile Home Park. This is the sole senior-only owner-occupied mobile home community within the area; no equivalent housing is available locally. Therefore, this alternative was withdrawn from further consideration.

1.6.3 Detour Across Railroad

This alternative proposed to detour State Route 140 traffic across the Burlington Northern & Santa Fe Railroad tracks using an at-grade intersection. This would have allowed demolition of the existing Bradley Overhead Bridge. This alternative was not considered viable because the at-grade intersection would result in added traffic delays within the project limits. In addition, this alternative was developed as an alternative for only the State Highway Operation and Protection Program project (bridge replacement only), not as an alternative for the State Transportation

Improvement Program project or the combined project. Therefore, it did not serve the purpose and need of the combined project and was therefore withdrawn from further consideration.

1.6.4 Railroad Underpass

This alternative proposed the construction of a railroad underpass under State Route 140. This alternative was considered impractical because the project site is in an existing floodplain with a high water table. Therefore, the alternative was withdrawn from further consideration.

1.6.5 State Route 140 Underpass

This alternative proposed the construction of an underpass for State Route 140 under the railroad. This alternative was considered impractical because the project site is in an existing floodplain with a high water table. Therefore, the alternative was withdrawn from further consideration.

1.6.6 Widen/Upgrade Existing Bridge

This alternative considered widening the existing Bradley Overhead Bridge. The alternative was not considered viable because the cost to widen the existing two-lane structure would be 40 percent more than the cost to replace it. In addition, other bridge deficiencies, such as sight distance and bridge profile grade, would not be corrected and modifications to the bridge would still be considered an impact to a historic resource eligible for the National Register. Therefore, this alternative was withdrawn from further consideration.

1.7 Design Options for Joe Herb Park

In addition to the three viable project alternatives, there were various design options (alternatives) for Joe Herb Park. Because the new Bradley Overhead Bridge would block off the current access from Sierra Portal Mobile Home Park onto State Route 140 (see Figure B3 in Appendix B for the existing layout of Joe Herb Park), Caltrans proposes to create access to the mobile home park via the northern end of Joe Herb Park.

During the early project development and design process, one proposal was to create a new access for the mobile home park from the southwest connecting Joe Herb Park

and the mobile home park to Parsons Avenue with an extension of Merced Avenue (currently not existing). Two early design options were developed (Design Options 1B and 1C) but dismissed because the new public road would create a physical boundary between Joe Herb Park and Golden Valley High School. Currently, the high school uses Joe Herb Park during physical education classes, and the school children would be forced to cross the new public road creating a potential safety problem. In addition, moving the existing access for the mobile home park to the southwest corner would disrupt the mobile home park community by relocating the entrance, manager's quarters, community center and several residents. Furthermore, traffic would be rerouted to Parsons Avenue, adding traffic to the residential area on Parsons Avenue and to the high school area. Therefore, these two alternatives were withdrawn from further consideration. Design Option 1D remained as the locally preferred alternative for Joe Herb Park.

For an in-depth discussion of the impacts to Joe Herb Park by the proposed project and a description of each design option concerning the park, please see Appendix B Section 4(f) Evaluation.

Below are the design options that were studied for Joe Herb Park.

1.7.1 Design Option 1A — Eastern Access to Baker Drive

Design Option 1A proposes to provide access to the northeast corner of the Sierra Portal Mobile Home Park via a new access road from Baker Drive (see Figure B4 in Appendix B). Traffic signals would be placed at the Kelly Avenue intersection and the Santa Fe Avenue intersection. This design option was not considered a viable avoidance alternative for the following reasons:

- Emergency service vehicles, such as fire, police and ambulance, would not be provided with efficient and safe access to the Sierra Portal Mobile Home Park, a predominantly senior citizen residential complex with more than 100 units. This design option would increase the average distance to the entrance for emergency service vehicles by approximately 540 meters (1/3 of a mile). This would increase the average response time from fire/rescue services by approximately 12 percent from the nearest fire station and by approximately 19 percent for police services from the nearest substation compared to Design Option 1D (see below). The new route for emergency services vehicles would involve navigating through additional intersections, adding to response times and the number of turns.

- Out-of-direction travel (north on Kelly Avenue, then east on Baker Drive and west on the eastern access road into the mobile home park) would add to response time and create potential confusion for emergency services and visitors of the mobile home park.

- Sierra Portal Mobile Home Park management and residents were opposed to this design option alternative and resulting impacts. Sierra Portal management and residents stressed the desire to keep the new access near the existing access due to its proximity to the clubhouse and manager's unit. With the entrance moved to the northeastern part of the mobile home park, the clubhouse and the manager's unit would be considerably farther from the new entrance. According to residents of the mobile home park, this would raise safety concerns and would not be as aesthetically pleasing as the existing situation.

- The costs (approximately $1.9 million according to mobile home park management) to move the manager's unit, the clubhouse, several mobile home park units and utilities would add significantly to the overall project cost.

- Increased project costs (approximately $246,000 [in 2004 dollars] excluding mitigation and utility relocation) would result from additional right-of-way needs associated with the eastern access.

In addition, the project development team, including City and County of Merced officials, were opposed to this design option because of the above-stated impacts to Joe Herb Park and the mobile home park.

1.7.2 Design Option 1D — New City Street

Design Option 1D proposes to realign access to the Sierra Portal Mobile Home Park through Joe Herb Park, connecting the existing entrance to the mobile home park (see Figure B5 in Appendix B). No relocation of any mobile home unit, other structure or utility within the mobile home park would be required.

A new access road would be constructed linking Kelly Avenue and the Sierra Portal Mobile Home Park entrance. A cul-de-sac would be constructed in the northeast corner of the park adjacent to the existing covered picnic area to facilitate turns and provide a loading and unloading area. All parking spaces removed would be replaced in kind (66 spaces in all), including several spaces that comply with the Americans

with Disabilities Act. In addition, several pedestrian pathways would be constructed to link various sections of the park, creating better flow through the park and enhancing facilities for people with disabilities. An Americans with Disabilities Act pathway linking the bus stop on State Route 140 to the parks' proposed new road would also be included in the design features. No impact to any existing park equipment or structures is anticipated. The playground equipment, bathroom facilities, covered picnic area and ball fields would all remain intact. Design Option 1D is the locally preferred alternative for Joe Herb Park.

1.7.3 Design Option 1E — Park Road Extension

Design Option 1E proposes to realign access to the Sierra Portal Mobile Home Park farther south through Joe Herb Park to the northwest corner of the mobile home park (see Figure B6 in Appendix B).

Design Option 1E was not considered viable for the following reasons:

- Closing the existing accesses to and from State Route 140 would re-route mobile home park traffic to Kelly Avenue through the middle of the Joe Herb Park. According to the Caltrans August 2002 Traffic Study for the proposed project, approximately 1,370 daily trips (132 vehicles during peak hour) enter and exit the mobile home park. The new city street accommodating this traffic would be located between the bathroom and barbecue facilities segmenting the park and forcing park visitors (pedestrians) to cross the public road.

- Relocation of the entrance, manager's quarters and community center would disrupt the mobile home community.

- Project cost would increase because several mobile home park units, including the manager's unit, and utilities within the mobile home park would have to be relocated.

In addition, the project development team, including City and County of Merced officials, Sierra Portal Mobile Home Park management and residents were opposed to this design option because of the above-stated impacts to Joe Herb Park and the senior citizen mobile home park.

1.7.4 Design Option 1F — Northern Access to Baker Drive

Design Option 1F would provide access to the northeast corner of the Sierra Portal Mobile Home Park via a new access road from Baker Drive passing under State Route 140 at the new bridge location (see Figure B7 in Appendix B). This design option would not re-route traffic from the mobile home park through Joe Herb Park, but access from Joe Herb Park to State Route 140 would still be blocked off because of the new Bradley Overhead Bridge.

This design option was not considered a viable avoidance alternative for the following reasons:

- Emergency service vehicles, such as fire, police and ambulance, would not be provided with efficient and safe access to the Sierra Portal Mobile Home Park, a predominantly senior citizen residential complex with more than 100 units. This design option would increase the average distance to the entrance for emergency service vehicles by approximately 350 meters (1/4 of a mile). This would increase the average response time from fire/rescue services by approximately 8 percent from the nearest fire station, and by approximately 12 percent for police services from the nearest substation compared to Design Option 1D. The new route for emergency services vehicles would also involve navigating through additional intersections, adding to response times and the number of turns.
- Out-of-direction travel (north on Kelly Avenue, then east on Baker Drive and south on the access road into the mobile home park) would add to response time and create potential confusion for emergency services and visitors of the mobile home park.
- Sierra Portal Mobile Home Park management and residents were opposed to this design option and resulting impacts. The desire to keep the new access near the existing access due to its proximity to the clubhouse and manager's unit was emphasized during meetings. With the entrance moved to the northeastern portion of the mobile home park, the clubhouse and the manager's unit would be considerably farther from the new entrance. According to the residents of the mobile home park, this would raise safety concerns and would not be as aesthetically pleasing as the existing situation.
- The costs (approximately $1.9 million according to mobile home park management) to move the manager's unit, the clubhouse, several mobile home park units and utilities would add significantly to the overall project cost.

- There would be increased project costs as a result of additional right-of-way needs associated with the northern access.

In addition, the project development team, including City and County of Merced officials, were opposed to this design option because of the above-stated impacts to Joe Herb Park and the senior citizen mobile home park.

1.8 Permits and Approvals Needed

Table 4 shows the permits, review, and approvals required for project construction.

Table 4 Permits Needed

Agency	Permit/Approval	Status
U.S. Fish and Wildlife Service	Section 7 Biological Opinion for San Joaquin kit fox	Biological Opinion was received January 12, 2005
State Historic Preservation Officer	Memorandum of Agreement (MOA)	MOA was signed June 13, 2005
Burlington Northern & Santa Fe Railroad	Cooperative agreement for proposed work within the railroad right-of-way	Pending
California State Water Resources Control Board	Notice of Intent	To be submitted before construction
Regional Water Quality Control Board	Section 401 - Regional Water Quality Control Board Water Quality Certification	Pending
California State Water Resources Control Board	Section 402, National Pollutant Discharge Elimination System Statewide Storm Water Permit	Existing permit #CAS000003 (SWRCB No. 99-06-DWQ)
City of Merced and County of Merced	Cooperative Agreements for: • New traffic signals at the intersections of State Route 140/Kelly Avenue and State Route 140/Santa Fe Avenue. • Modification of existing traffic signal at Parsons Avenue. • Local road realignments at Baker Drive and Santa Fe Avenue. • Maintenance of the landscaping at the drainage basin and inside the Joe Herb Park after one year of acceptance of construction completion. • Modified maintenance agreement for maintenance of traffic signals at local road intersections. • New local road access provided for Sierra Portal Mobile Home Park through Joe Herb Park (The ultimate cooperative agreement will be between City of Merced and the Sierra Portal Mobile Home Park.)	Pending

WITHDRAWN ALTERNATIVES FOR

SR 140 BRADLEY OVERHEAD REPLACEMENT AND WIDENING PROJECT

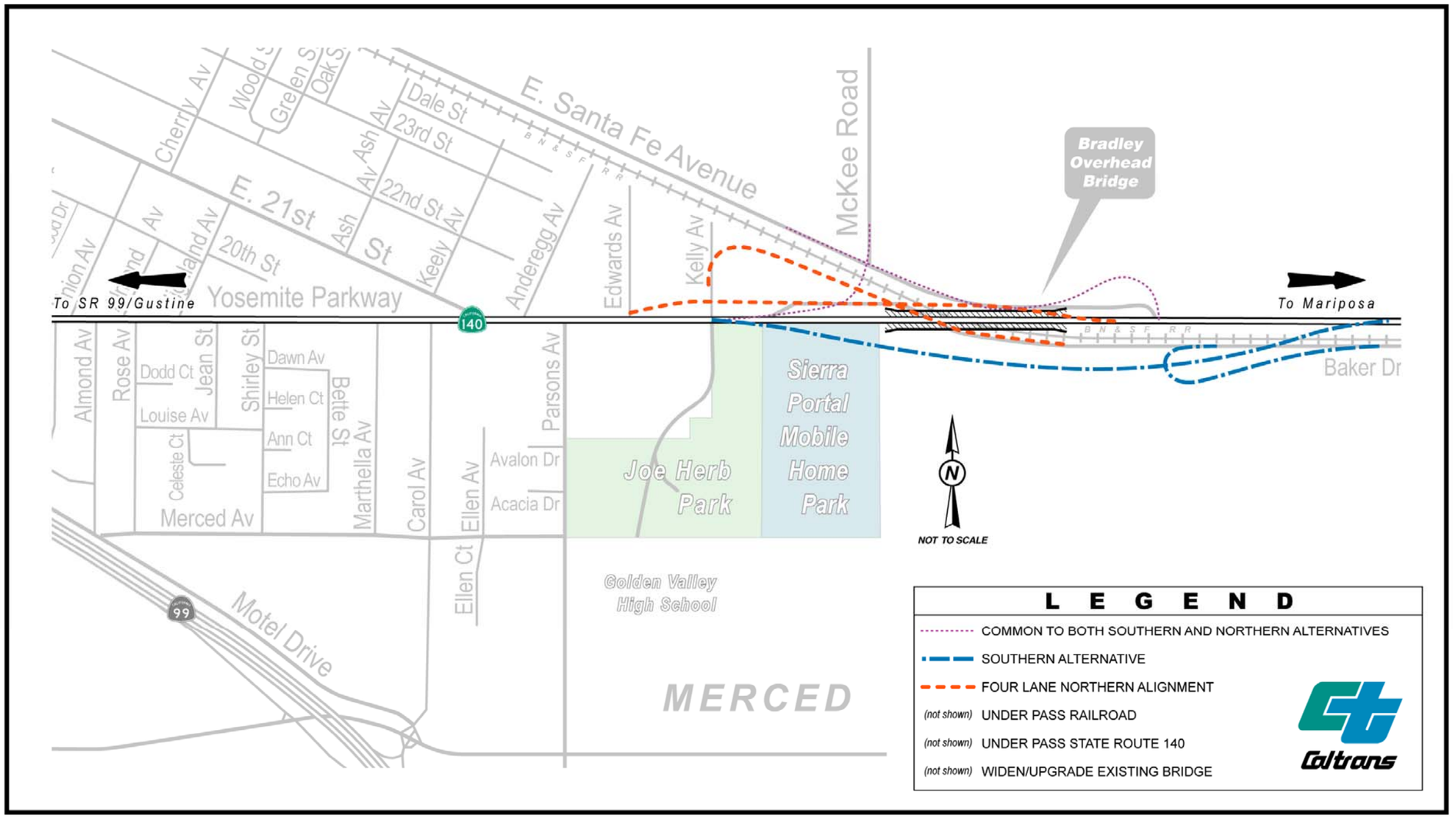


Figure 13 Withdrawn Alternatives

Chapter 2 Affected Environment, Environmental Consequences, and Avoidance, Minimization and/or Mitigation Measures

The discussion in this chapter was focused using the Environmental Checklist that is provided in Appendix A. All potential impacts and other concerns resulting from the project are discussed in this chapter.

As part of the scoping and environmental analysis conducted for the project, the following environmental resources/issues were considered but no potential for adverse impacts to these resources was identified. Consequently, there is no further discussion regarding these resources in this document.

- Growth — There would be no change in the growth patterns of the area as a result of the project because of the nature of the project.
- Farmland — No farmland lies in the project area.
- Geological Resources — none (*Preliminary Geotechnical Report, June 2002*).
- Paleontological Resources — none (*Initial Paleontology Study, October 2002*).
- Wild and scenic rivers — No wild and scenic rivers are located in the project area.
- Coastal barriers and coastal zone — No coastal barriers or coastal zones lie in the project area.
- Wetlands — No Army Corps of Engineers jurisdictional wetlands or other waters of the U.S. are located in the project area (*Natural Environmental Science Report, March 2003*).
- Plant Species — No special-status plants have been identified in the project area (*Natural Environmental Science Report, March 2003*).

These studies are incorporated by reference into this Draft Environmental Impact Report/Environmental Assessment and are available from the Caltrans District 6 office at 2015 E. Shields Avenue, Suite 100, in Fresno, California. A copy of the Draft Environmental Impact Report/Environmental Assessment is also available for review in Merced at the Merced County Library Main Branch, 2100 O Street, Merced, CA 95340.

2.1 Human Environment

2.1.1 Land Use

2.1.1.1 Regulatory Setting

Caltrans projects are designed to be consistent with planned growth in accordance with local and regional plans. Local government is the appropriate body to determine the extent of growth. Caltrans' transportation projects are designed to accommodate planned growth as stated in the Merced County and City of Merced General Plans.

2.1.1.2 Affected Environment

State Route 140, an east/west highway running through the city and county of Merced, is an important route connecting various cities and communities, and providing travelers access to and from Yosemite National Park. The project lies in an urban area consisting of mostly residential and business buildings, a public park and two churches. Areas in the eastern half of the project area are zoned for agricultural use and are interspersed with rural residences.

The City of Merced General Plan, *Merced Vision 2015,* and the County of Merced General Plan, *Merced 2000,* state the direction of land use for the project area. Both general plans have adopted and implemented the "Urban Centered Concept" for development. The purpose of this concept is to guide future growth into established urban areas based on the ability of the area to furnish public services.

The City of Merced is located within the Merced Specific Urban Development Plan area, commonly known as its "urban expansion area." The Specific Urban Development Plan boundary is recognized as the ultimate growth boundary of the City of Merced over the life of the plan. Merced County policy states that all land within the Specific Urban Development Plan is planned for eventual development in a mixture of urban and urban-related uses. The City General Plan builds on this policy for its long-term growth strategy, which includes guiding urban growth toward the least productive soils in the area and buffering adjacent agricultural lands from urban development.

2.1.1.3 Impacts

The proposed project conforms to and is consistent with the City of Merced General Plan, *Merced Vision 2015,* and the County of Merced General Plan, *Merced 2000,*

and would therefore have no negative unanticipated impacts to land use in the project area.

2.1.1.4 Avoidance, Minimization and/or Mitigation Measures

No mitigation is required.

2.1.2 Parks and Recreational Facilities

2.1.2.1 Affected Environment

One public park, Joe Herb Park, lies in the project area on the south side of State Route 140 at Kelly Avenue. The city-owned and -maintained park is approximately 6.47 hectares (16 acres) in size and bordered by State Route 140 to the north, Sierra Portal Mobile Home Park to the east, Golden Valley High School to the south and Kelly Avenue to the west. The park contains picnic areas with barbecues and shelters, playground equipment, bathrooms, parking, three baseball/softball fields, horseshoe pits, and open space for public use. The park is used for organized soccer and baseball/softball leagues.

2.1.2.2 Impacts

To improve traffic flow on State Route 140, the project proposes to control access to State Route 140 by closing the existing accesses from the Sierra Portal Mobil Home Park and Joe Herb Park. Additionally, to provide greater sight distance, the new bridge would be built with a less steep incline than the existing bridge. This new incline would begin approximately 80 meters (262 feet) earlier on State Route 140 thereby blocking off the current exit of Joe Herb Park and entrance of Sierra Portal Mobile Home Park.

A new access road would be constructed to link Kelly Avenue and the Sierra Portal Mobile Home Park entrance through Joe Herb Park, connecting to the existing entrance to the mobile home park (Design Option 1D). A cul-de-sac would be constructed in the northeast corner of the park adjacent to the existing covered picnic area to facilitate turns and provide a loading and unloading area. To accommodate the new design of the park (new access, converting existing park road to two-way traffic, extending existing road and removing parts of existing road), approximately 66 parking spaces would have to be removed, including several spaces designated for the disabled.

Approximately 0.8 hectare (1.9 acres) of the 6.5-hectare (16-acre) park would be affected, including removal of approximately 22 trees and a few

miscellaneous shrubs, portions of open grass areas, portions of the existing roadway/parking, and segments of the existing irrigation system. The net-loss of green space to paved area would be minimal (depending on the chosen design option: 0.1 hectare (0.25 acre) for Design Option 1D) since most of the affected park property would remain green area.

No impact to any existing park equipment or structures is anticipated. The playground equipment, bathroom facilities, covered picnic area and ball fields would all remain intact.

Closing the existing accesses to and from State Route 140 would re-route mobile home park traffic through Joe Herb Park to Kelly Avenue. According to the Caltrans August 2002 Traffic Study for the proposed project, approximately 1,370 daily trips (132 vehicles during peak hour) enter and exit the existing mobile home park. The new city street accommodating this traffic would be located at the northern end of Joe Herb Park, parallel to State Route 140, routing mobile home park and internal Joe Herb Park traffic to Kelly Avenue (Design Option 1D). Even though the additional traffic from the mobile home park would increase traffic in Joe Herb Park, impacts are negligible since no park facility or pedestrian traffic would be affected.

For an in-depth discussion of the impacts to Joe Herb Park by the proposed project and a description of each design option concerning the park, please see Appendix B Section 4(f) Evaluation.

2.1.2.3 Avoidance, Minimization and/or Mitigation Measures

The following avoidance and or mitigation measures are recommended to avoid or offset any impacts to Joe Herb Park:

- Avoid structures or equipment existing in the park.
- Construct Americans with Disabilities Act-compliant pedestrian pathways connecting facilities and parking and creating better transportation flow through the park.
- Replace all removed parking stalls in kind, including creation of four addtional Americans with Disabilities Act-compliant stalls.
- Replant all areas that previously contained paved surfaces with grass and intermittent trees and shrubs.

- All trees and/or shrubs requiring removal for construction activities would be replaced in kind with species approved by the City of Merced and Caltrans, and in keeping with the surrounding ambience of the park.

For an in-depth discussion of the impacts to Joe Herb Park by the proposed project and a description of each design option concerning the park, please see Appendix B Section 4(f) Evaluation.

2.1.3 Relocations

2.1.3.1 Regulatory Setting

The Caltrans Relocation Assistance Program is based on the Federal Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (as amended) and Title 49 Code of Federal Regulations Part 24. The purpose of the Relocation Assistance Program is to ensure that persons displaced as a result of a transportation project are treated fairly, consistently, and equitably so that such persons will not suffer disproportionate injuries as a result of projects designed for the benefit of the public as a whole. Please see Appendix D for a summary of the Relocation Assistance Program.

All relocation services and benefits are administered without regard to race, color, national origin, or sex in compliance with Title VI of the Civil Rights Act (42 U.S.C. 2000d, et seq.). Please see Appendix C for a copy of Caltrans' Title VI Policy Statement.

2.1.3.2 Affected Environment

A Draft Relocation Impact Study was completed to provide information about the effects of the project on residential and non-residential occupants within the project impact area. This study addresses potential problems caused by displacement of existing structures and their occupants. The Draft Relocation Impact Study also identified all residential and non-residential units within the displacement area of each build alternative.

The assessment was based on field observations and interviews with real estate professionals. Specific relocation requirements for a selected alternative would be included in the Final Relocation Impact Study, at which time interviews would be conducted with each affected property owner and tenant before the acquisition process would begin.

The project lies in an urban area consisting of mostly residential and business buildings. Areas in the eastern half of the project area are zoned for agricultural use and are interspersed with rural residences. A senior-only mobile home park (Sierra Portal Mobile Home Park) is located on the south side of State Route 140 between Joe Herb Park and the Bradley Overhead Bridge.

2.1.3.3 Impacts

The two build alternatives would have very similar impacts. Approximately 6.1 hectares (15.1 acres) of additional right-of-way would be needed for Alternative 1 and 5.9 hectares (14.6 acres) for Alternative 2. Six businesses, one vacant building and four single-family residences would be displaced by either build alternative. Ten additional parcels would experience some small property takes with Alternative 1 (see Table 5 for Assessor Parcel Numbers and size) and six with Alternative 2 (see Table 6 for Assessor Parcel Numbers and size).

The project would also require temporary use of the parking lot at the Apostolic Tabernacle Church, located at Santa Fe Avenue and State Route 140. During project construction, the church's parking area would have to be moved to the rear of the property due to the temporary realignment of Santa Fe Avenue. At project completion, the parking lot would be restored to its original location, with its original entrance intact. No permanent impacts to the church are anticipated.

As a consequence of constructing the new bridge, existing access to the Sierra Portal Mobile Home Park would be permanently closed. To comply with current design standards for sight distance, heading eastbound the new structure would begin its incline approximately 80 meters (262 feet) earlier on State Route 140, thereby blocking off the current access. To compensate, Caltrans proposes to create access to the mobile home park via the northern end of Joe Herb Park. The existing entrance to Joe Herb Park, off of State Route 140, would be used in the construction of a new frontage road linking up with the northwest part of the mobile home park, nearest the manager's office and club house of the mobile home park. No relocations would be necessary in the mobile home park.

Table 5 Potential Relocations/Right-of Way Acquisitions, Alternative 1

Assessor Parcel Number	Parcel Size in feet^2 (meters^2)	Required Area for project in feet^2 (meters^2)
034-240-010	5,382 (500)	5,382 (500)
034-240-009	6,459 (600)	6,459 (600)
034-240-020	75,350 (7,000)	24,758 (2,300)
034-240-021	60,280 (5,600)	34,446 (3,200)
034-240-023	31,216 (2,900)	15,070 (1,400)
034-240-022	11,841 (1,100)	11,841 (1,100)
034-250-001	53,821 (5,000)	53,821 (5,000)
061-320-017	174,381 (16,200)	7,535 (700)
061-320-018	109,795 (10,200)	4,306 (400)
061-320-019	30,140 (2,800)	17,223(1,600)
061-320-024	399,892 (37,150)	48,439 (4,500)
061-390-001	16,146 (1,500)	753 (70)
034-240-011	16,146 (1,500)	108 (10)
061-390-020	1,162,540 (108,000)	14,1012 (13,100)
035-090-006	19,376 (1,800)	3,229 (300)
061-050-005	Railroad parcel, exact size not known	17,223 (1,600)
034-250-002	43,057 (4,000)	43,057 (4,000)
034-250-005	29,063 (2,700)	29,063 (2,700)
034-250-004	13,994 (1,300)	13,994 (1,300)
061-320-025	383,208 (35,600)	158,235 (14,700)
061-390-019	753,498 (70,000)	17,223 (1,600)

Table 6 Potential Relocations/Right-of Way Acquisitions, Alternative 2

Assessor Parcel Number	Parcel Size in feet^2 (meters^2)	Required Area for project in feet^2 (meters^2)
034-240-010	5,382 (500)	5,382 (500)
034-240-009	6,459 (600)	6,459 (600)
034-240-020	75,350 (7,000)	24,758 (2,300)
034-240-021	60,280 (5,600)	34,446 (3,200)
034-240-023	31,216 (2,900)	15,070 (1,400)
034-240-022	11,841 (1,100)	11,841 (1,100)
034-250-001	53,821 (5,000)	53,821 (5,000)
061-320-017	174,381 (16,200)	7,535 (700)
061-320-018	109,795 (10,200)	4,306 (400)
061-320-019	30,140 (2,800)	17,223(1,600)
061-320-024	399,892 (37,150)	48,439 (4,500)
061-390-020	1,162,540 (108,000)	14,1012 (13,100)
034-250-002	43,057(4,000)	43,057 (4,000)
034-250-005	29,063 (2,700)	29,063 (2,700)
034-250-004	13,994 (1,300)	13,994 (1,300)
061-320-025	383,208 (35,600)	158,235 (14,700)
061-390-019	753,498 (70,000)	17,223 (1,600)

2.1.3.4 Avoidance, Minimization and/or Mitigation Measures

Affected landowners would receive fair market value compensation for partial acquisition of property that would be needed for either alternative. Relocated homeowners would receive fair treatment as required by law and according to the Relocation Assistance Program as specified under Public Law 91-646, Uniform Relocation Assistance, and Real Property Acquisition Policies of 1970, as amended.

In addition, Caltrans relocation programs are sensitive to the special needs of displaced residents to ensure that those individuals' relocation needs are met. Caltrans meets that goal by determining needs and preferences through interviews with displaced individuals, providing information on other state and federal assistance programs, and offering counseling services to minimize hardships.

The Fair Housing Law (Title VII of the Civil Rights Act of 1968) sets forth the policy of the U.S. government to provide, within constitutional limitations, for fair housing throughout the nation. This act and later acts and amendments make discriminatory practices in the purchase and rental of most residential units illegal if based on race, color, religion, sex, national origin, age, or handicap. Caltrans has similar directives against discrimination in its Director's Title VI Policy Statement (Appendix C).

2.1.4 Community Character and Environmental Justice

2.1.4.1 Regulatory Setting

The National Environmental Policy Act of 1969 as amended established that the federal government use all practicable means to ensure for all Americans safe, healthful, productive, and aesthetically and culturally pleasing surroundings [42 U.S.C. 4331(b)(2)]. The Federal Highway Administration in its implementation of the National Environmental Policy Act [23 U.S.C. 109(h)] directs that final decisions regarding projects are to be made in the best overall public interest. This requires taking into account adverse environmental impacts, such as destruction or disruption of human-made resources, community cohesion and the availability of public facilities and services.

Under the California Environmental Quality Act, an economic or social change by itself is not to be considered a significant effect on the environment. However, if a social or economic change is related to a physical change, then social or economic change may be considered in determining whether the physical change is significant. Since this project would result in physical change to the environment, it is appropriate to consider changes to community character and cohesion in assessing the significance of the project's effects.

All federally funded projects must comply with environmental justice regulations as defined by "Executive Order 12898, Federal Actions to Address Environmental Justice in Minority populations and Low-Income Populations," signed by President Bill Clinton on February 11, 1994. Executive Order 12898 directs federal agencies to take the appropriate and necessary steps to identify and address disproportionately high and adverse effects of federal projects on the health or environment of minority and low-income populations to the greatest extent practicable and permitted by law. Low income is defined based on the Department of Health and Human Services poverty guidelines. For 2004, this was $18,850 annual income for a family of four.

All considerations under Title VI of the Civil Rights Act of 1964 and related statutes have also been included in this project. Caltrans' commitment to uphold the mandates of Title VI is evidenced by the Caltrans Title VI Policy Statement (see Appendix C).

2.1.4.2 Affected Environment

Census 2000 conducted by the U.S. Census Bureau lists the population for Merced County at 210,554, which is a 15.3 percent increase from the 1990 census. Fifty-seven percent of the population lives in the six incorporated cities of the county: Atwater, Dos Palos, Gustine, Livingston, Los Banos, and Merced. The remainder of the county is rural and unincorporated.

Three churches (Apostolic Tabernacle, Mission Christian Principal, and Church of Christ), one school (Golden Valley High School), a city park (Joe Herb Park), and the Sierra Portal Mobile Home Park lie in the project area. In addition, several residential (apartments and single-family houses) and commercial developments lie in the area.

To access State Route 140, local residents travel through the area on roads maintained by the City and County of Merced. When using the highway, emergency vehicles, such as police, fire and ambulance services, must contend with narrow lanes, limited sight distance and a steep grade over the Bradley Overhead Bridge.

Population data in Tables 7, 8 and 9 show slightly different totals for the project area because data for ethnicity is available from the Census Bureau for each individual block (smaller area) while data for poverty and age are only available on a block group level (larger area). In addition, population data for Merced County and the city in Table 8 (1999) vary slightly from the data in Tables 7 and 9 (2000) because of the different years the data was taken.

Merced County typically has a high percentage of Hispanics or Latinos, an established minority population. The 2000 U.S. Census data (see Table 7) reported a large Hispanic population in Merced County (45.3 percent) and the Merced city area (41.4 percent). In the project area, Hispanics/Latinos comprise the second largest ethnic group (32.7 percent) after Whites (48.3 percent). The second largest ethnic group in Merced County (40.7 percent) and the Merced city area (37.8 percent) is Whites. The third largest ethnic group is Asians with 6.7 percent in Merced County, 11.2 percent in the Merced city area and 11.4 percent in the project area. All other ethnic groups together comprise between 7.3 and 9.6 percent of the population. The census information confirms that no disproportionately high minority population is located in the project area.

Table 7 Ethnicity Data

Ethnicity Data (Census Bureau 2000)						
	Merced County		Merced City		Project Area	
	Population	%	Population	%	Population	%
Hispanic or Latino	95,466	45.3	26,425	41.4	709	32.7
White	85,585	40.7	24,121	37.8	1047	48.3
Black – African-American	7,594	3.6	3,864	6.0	91	4.2
American Indian/Alaska Native	1,115	0.5	368	0.6	12	0.5
Asian	14,041	6.7	7,182	11.2	248	11.4
Native Hawaiian etc.	281	0.1	77	0.1	2	0.1
Other	6,472	3.1	1,856	2.9	68	3.1
Total	210,554	100*	63,893	100*	2,167	100*

**Total might be slightly over 100% due to rounding*
Source: U.S. Census Bureau, American FactFinder, Year 2000

U.S. Census Bureau poverty data indicated that the percentage of people living below the poverty level for the project area is higher than average (see Table 8): 29 percent of the population in the project area lives below the poverty threshold compared to 27.9 percent of the population in the Merced city area and 21.7 percent of the population in Merced County. The poverty threshold was $18,850 for a family of four in 2004.

Table 8 Poverty Data

Poverty Status in 1999						
	Merced County		Merced City		Project Area	
	Population	%	Population	%	Population	%
Below poverty level	45,059	21.7	17,489	27.9	2,361	29.0
At or above poverty level	162,993	78.3	45,295	72.1	5,794	71.0
Total	208,052	100	62,784	100	8,155	100

Source: U.S. Census Bureau, American FactFinder, Year 2000

Table 9 shows the age distribution of the population in the City of Merced and the project area compared to the state as a whole and Merced County. In 2000, 11.4 percent of the project area's population was at least 65 years of age, slightly higher

than the statewide average of 10.6 percent and approximately two percent higher than the average in Merced County and City of Merced.

Table 9 Age Distribution

Age Data (Census 2000)								
Age Breakdown	California		Merced County		Merced City		Project Area	
	Number	%	Number	%	Number	%	Number	%
Under age 18	9,221,463	27.2	72,413	34.4	22,099	34.5	2,891	35.3
Between 18 - 64	21,063,391	62.2	118,317	56.2	35,995	56.3	4,363	53.3
65 years and over	3,586,794	10.6	19,824	9.4	5,897	9.2	931	11.4
Total	**33,871,648**	**100**	**210,554**	**100**	**63,991**	**100**	**8,185**	**100**

Source: U.S. Census Bureau, Year 2000

2.1.4.3 Impacts

Realignment and widening of State Route 140 would improve intersections along the route. The project would result in faster response times for emergency vehicles and school buses using the route.

A new Bradley Overhead Bridge on State Route 140 would improve local traffic operations within the project area. The construction of a new bridge would increase sight distance at the bridge and improve community cohesion and access through the local area by providing a sidewalk and safe pedestrian and bicyclist passage over the bridge.

Planning efforts between the City of Merced and Caltrans propose to close the existing mobile home park entrance and re-route traffic through Joe Herb Park. One residence would be relocated within the mobile home park. There is strong community support for the replacement of the Bradley Overhead Bridge because the structure is not viewed favorably by the local community (see Chapter 4 *Comments and Coordination*).

Even though U.S. Census Bureau poverty data indicated that the percentage of people living below the poverty level for the project area is slightly higher than for the City of Merced, the 1.1 percent difference also shows that there is no disproportionate impact to a low-income population.

Constructing the project would result in the acquisition of four residences, on vacant building and six businesses. Sufficient housing resources exist to relocate all displacees. Right-of-way would be acquired in a linear strip along the existing right-of-way to accommodate the future roadway requirements.

Noise does not disproportionately or adversely affect minority and low-income populations because increasing noise levels would be uniform throughout the project area. Noise abatement (a soundwall) is proposed at the senior-only mobile home park. In addition, the existing alignment of State Route 140 would be kept and not shifted to a different location.

Displacing and relocating persons within a minority and low-income community would be an adverse effect, but the effect would not be disproportionately high for the following reasons:

- Displacements occur in only one part of a low-income area; most of the project area is considered to be low-income, therefore the impact is not predominately borne by a low-income community.
- Mitigation measures such as relocation assistance would be provided to all displaced persons, therefore lessening the severity of the impact to the minority and low-income population within the project area.

Beneficial effects, such as improved safety, increased capacity, better emergency response time, sidewalks and bicycle facility on the bridge that are being proposed, would benefit the overall population within the project area as well as the public as a whole.

2.1.4.4 Avoidance, Minimization and/or Mitigation Measures

As part of Caltrans' mitigation, a Relocation Assistance Program would be provided to any displaced persons as a result of this project. The purpose of the Relocation Assistance Program is to ensure that persons displaced as a result of a transportation project are treated fairly, consistently, and equitably so that such persons will not suffer disproportionate injuries as a result of projects designed for the benefit of the public as a whole. All relocation services and benefits are administered without regard to race, color, national origin, or sex in compliance with Title VI of the Civil Rights Act (42 U.S.C. 2000d, et seq.). Comparable housing would be made available for all displaced persons.

Noise abatement measures propose placing a noise barrier at locations in front of the mobile home park to reduce noise impacts.

Based on the above discussion and analysis, the build alternatives would not cause disproportionately high and adverse effects on any minority or low-income populations per Executive Order 12898 regarding environmental justice.

2.1.5 Utilities/Emergency Services

2.1.5.1 Affected Environment

Underground and overhead utilities exist within the state right-of-way. Accommodation or relocation of these utilities would depend on conflict analysis during the final design phase of this project.

2.1.5.2 Impacts

Relocation of utilities would be required. Pacific Gas & Electric Company, under Ordinance "Rule 20A," is proposing to place the overhead electric utilities underground. The potentially affected utility owners include Pacific Bell (SBC), Pacific Gas & Electric, City of Merced, Merced Irrigation District, Level 3 and AT&T.

Currently, the non-standard design features of the bridge (no shoulders, lack of adequate stopping sight distance, non-standard vertical and horizontal clearances between the bridge columns) and the narrow space between the bridge columns at Baker Drive (less than 5 meters [16 feet] wide) under the structure increase emergency response times and cause the bridge to be closed down even for minor incidents. These deficiencies would be corrected by replacing the existing bridge with a wider structure, widening the road in the project limits to five lanes and realigning local streets. Emergency response times should improve with project completion. Also, during construction, emergency vehicles would be given priority access to State Route 140.

2.1.5.3 Avoidance, Minimization and/or Mitigation Measures

Prior to construction, public utilities affected by the project would be relocated. During construction, one to two lanes of traffic would remain open at all times. Emergency vehicles would be given priority.

2.1.6 Traffic and Transportation/Pedestrian and Bicycle Facilities

2.1.6.1 Regulatory Setting

The Federal Highway Administration directs that full consideration should be given to the safe accommodation of pedestrians and bicyclists during the development of federal-aid highway projects (see 23 CFR 652). It further directs that the special needs of the elderly and the disabled must be considered in all federal-aid projects that include pedestrian facilities. When current or anticipated pedestrian and/or bicycle traffic presents a potential conflict with motor vehicle traffic, every effort must be made to minimize the detrimental effects on all highway users who share the facility.

Caltrans and the Federal Highway Administration are committed to carrying out the 1990 Americans with Disabilities Act by building transportation facilities that provide equal access for all persons. The same degree of convenience, accessibility, and safety available to the general public will be provided to persons with disabilities.

2.1.6.2 Affected Environment

The City of Merced has several existing and proposed Class I off-road bicycle/pedestrian trails. Much of this system is located along existing waterways (Bear, Black Rascal, Cottonwood, and Fahrens creeks).

Likewise, Merced County has a series of bike paths, lanes, and routes and continues to assist cities and communities in planning for bikeways. Merced has an extensive bike path system, encompassing Class I bike paths and Class II bike lanes. Class I bike paths provide separate right-of-way designated for the exclusive use of cyclists, while Class II bike lanes lie in the paved area of the road; these areas have signs and share the roadway with motor vehicles.

The project lies on State Route 140 in an urban area at the eastern edge of the City of Merced. Through this area are open fields, office/business structures, churches, single-family and multi-family residences, a city park, and a mobile home park. Currently, there are no sidewalks for pedestrians or bicycle facilities crossing the bridge, and no Park and Ride facilities are located along State Route 140 in Merced County.

2.1.6.3 Impacts

For both Alternatives 1 and 2, the proposed 2.4-meter (8-foot) shoulders would be open to bicyclists and would serve as a Class II bike path.

Both Alternatives 1 and 2 propose to construct sidewalks along the north side of the existing alignment and curb ramps at local road intersections in compliance with the Americans with Disabilities Act requirements.

Presently, there are no Park and Ride facilities along State Route 140 in Merced County. A Park and Ride facility in the vicinity of this project would be an integral part of other Transportation Control Measures designed to reduce vehicle miles traveled, thereby reducing congestion and motor vehicle emissions.

Traffic congestion and delay would occur at local street intersections, such as Anderegg Avenue, Kelly Avenue and Santa Fe Avenue due to heavy traffic volumes on State Route 140 if no improvements were implemented in the future (year 2027). The Level of Service at these intersections would deteriorate to "E" to "F." However, the projected Level of Service for local streets for the design year 2027 would be better for Alternative 1 than for Alternative 2, therefore reducing the likelihood for a future widening project and avoiding future disruption to traffic and residents.

Baker Drive, currently less than 5 meters (16 feet) wide under the existing bridge, would be realigned to a "T" intersection with Kelly Avenue north of State Route 140. The realignment would eliminate the existing sharp-angle intersection with State Route 140 and provide access to State Route 140 via Kelly Avenue.

Closing of the existing accesses to and from State Route 140 would re-route mobile home park traffic through Joe Herb Park to Kelly Avenue. According to the Caltrans August 2002 Traffic Study for the proposed project, approximately 1,370 daily trips (132 vehicles during peak hour) enter and exit the existing mobile home park. The new city street accommodating this traffic would be located at the northern end of Joe Herb Park, parallel to State Route 140, routing mobile home park and internal Joe Herb Park traffic to Kelly Avenue (Design Option D). Even though the additional traffic from the mobile home park would increase traffic in Joe Herb Park, impacts are negligible since no park facility or pedestrian traffic would be affected and no facilities would be located north of the new road. Therefore, pedestrian traffic would not conflict with vehicular traffic.

During the different stages of construction, lane closures would be necessary to shift traffic, causing potential traffic delays. In addition, Santa Fe Avenue would be temporarily realigned to the east to keep traffic flowing during construction. After completion of the final alignment, this temporary detour would be removed.

In addition, three construction stages are proposed. The first stage would include constructing the proposed westbound lanes along the northern side of State Route 140 and the Bradley Overpass. The second stage would demolish and remove the existing structure. The third stage would complete the project by constructing the proposed eastbound lanes along the southern side of State Route 140 and the new westbound lanes of the new bridge.

2.1.6.4 Avoidance, Minimization and/or Mitigation Measures

A Park and Ride facility for this location has been identified in the District 10 Park and Ride Plan (draft) and recommended by the Park and Ride Coordinator. See Chapter 1, Section 1.3.3, for more details.

A Transportation Management Plan has been developed to minimize motorist delays during construction. Preliminary elements such as public information, motorist information strategies, incident management and construction strategies have been considered and incorporated into the project scope. A public awareness campaign including public workshops, in cooperation with local newspaper and broadcast media, would be considered in advance of construction to inform the public of anticipated lane closures.

2.1.7 Visual/Aesthetics

2.1.7.1 Regulatory Setting

The National Environmental Policy Act of 1969 as amended establishes that the federal government use all practicable means to ensure all Americans safe, healthful, productive, and *aesthetically* and culturally pleasing surroundings [42 U.S.C. 4331(b)(2)]. To further emphasize this point, the Federal Highway Administration in its implementation of National Environmental Policy Act [23 U.S.C. 109(h)] directs that final decisions regarding projects are to be made in the best overall public interest taking into account adverse environmental impacts, including among others, the destruction or disruption of aesthetic values.

Likewise, the California Environmental Quality Act establishes that it is the policy of the state to take all action necessary to provide the people of the state "with . . . enjoyment of *aesthetic*, natural, scenic and historic environmental qualities" [CA Public Resources Code Section 21001(b)].

2.1.7.2 Affected Environment

The project lies on State Route 140 in an urban area at the eastern edge of the City of Merced in Merced County. Expansive fields, office/business structures, churches, single-family and multi-family residences, a city park, and a mobile home park are located in this area. A number of Scenic Resource Evaluations (January 2001, Revised March 2001 and Revisited Scenic Resource Evaluations Memo December 26, 2002) were conducted for this project. In addition, potential visual impacts caused by the replacement of the existing bridge were discussed in an April 2005 memo.

2.1.7.3 Impacts

Visual resources in the project area include a large cedar tree and a large eucalyptus tree, both in the Kelly Avenue area along State Route 140. These trees are visible from State Route 140 in both directions for more than 1 kilometer (¾ of a mile). Other large trees and shrubs, partially creating a visual barrier from the road, are located on properties along State Route 140 within the project area. A palm tree and two Raywood ash trees would need to be removed. Within the city park, the following types of trees and shrubs could potentially be affected: ash, locust, flowering pear, privet, hawthorn, crape myrtle, and various other shrubs and roses.

The project would slightly improve overall visual quality. Visual blight, including old cars and buildings, would be eliminated with the placement and expansion of the new bridge structure and the Baker Drive relocation. Distance views would be slightly improved as the structure would sit a little higher and drivers would have a better opportunity to see these views. The roadway would be much improved in sight distance and width; the current structure is very narrow and drivers must keep their eyes on the road to see ahead. Structural concepts and landscape development may enhance visual compatibility of the new bridge and its elevated approaches. The retaining wall and soundwall design would incorporate visual aesthetics and climbing vines to deter graffiti.

2.1.7.4 Avoidance, Minimization and/or Mitigation Measures

Mitigation planting would begin immediately following the roadway construction. A variety of trees and shrubs similar to what currently exists in the project area would be planted to mitigate the visual impacts. Where possible, large trees should either be preserved in place or moved to another location (to be determined at a later date).

2.1.8 Historical Resources and Archaeological Preservation

2.1.8.1 Regulatory Setting

"Cultural resources" as used in this document refers to all historical and archaeological resources, regardless of significance. Laws and regulations dealing with cultural resources include the following.

The National Historic Preservation Act of 1966, as amended, sets forth national policy and procedures regarding historic properties, defined as districts, sites, buildings, structures, and objects included in or eligible for the National Register of Historic Places. Section 106 of National Historic Preservation Act requires federal agencies to take into account the effects of their undertakings on such properties and to allow the Advisory Council on Historic Preservation the opportunity to comment on those undertakings, following regulations issued by the Advisory Council on Historic Preservation (36 CFR 800). On January 1, 2004, a Section 106 Programmatic Agreement among the Advisory Council, the Federal Highway Administration, State Historic Preservation Officer, and Caltrans went into effect for Caltrans projects, both state and local, with Federal Highway Administration involvement. The Programmatic Agreement takes the place of the Advisory Council's regulations, 36 CFR 800, streamlining the Section 106 process and delegating certain responsibilities to Caltrans.

Historic properties may also be covered under Section 4(f) of the U.S. Department of Transportation Act, which regulates the "use" of land from historic properties. See Appendix B for specific information regarding Section 4(f).

Historical resources are considered under the California Environmental Quality Act, as well as California Public Resources Code Section 5024.1, which established the California Register of Historical Resources. Public Resources Code Section 5024 requires state agencies to identify and protect state-owned resources that meet National Register of Historic Places listing criteria. It further specifically requires Caltrans to inventory state-owned structures in its rights-of-way. Sections 5024(f) and 5024.5 require state agencies to provide notice to and consult with the State Historic Preservation Officer before altering, transferring, relocating, or demolishing state-owned historical resources that are listed on or are eligible for inclusion in the National Register or are registered or eligible for registration as California Historical Landmarks.

2.1.8.2 Affected Environment

The project area was surveyed for archaeological sites as well as historic properties that may potentially be eligible for inclusion on the National Register of Historic Places. The Bradley Overhead Bridge was the only cultural property identified within the project area; no prehistoric or historical archaeological sites or features were encountered. The Bradley Overhead Bridge, built in 1931, has been determined to be eligible for inclusion in the National Register of Historic Places because it was the first arc-welded steel girder bridge in California and served as an important element of the "All-Year Highway" to Yosemite. The bridge was built as part of the state's grade crossing elimination program, which provided bridging of dangerous rail crossings in California. The bridge is the last one of its kind in California.

2.1.8.3 Impacts

The Bradley Overhead Bridge was identified to be eligible for inclusion in the National Register of Historic Places. The State Historic Preservation Officer concurred with the finding on December 18, 2001 (see Appendix G).

Both build alternatives (Alternatives 1 and 2) would replace the Bradley Overhead Bridge with a new structure.

Because the proposed project would result in the destruction of the Bradley Overhead Bridge, a historic resource eligible for the National Register of Historic Places, Caltrans prepared an analysis according to Section 4(f) of the U.S. Department of Transportation Act of 1966. This analysis (see Appendix B "Section 4(f) Evaluation") describes how Caltrans developed alternatives to avoid the destruction of the bridge. None of these alternatives, however, were deemed feasible. In addition, it was apparent during coordination with the local agencies and the public that there was no local support for maintaining the existing structure.

2.1.8.4 Avoidance, Minimization and/or Mitigation Measures

The Bradley Overhead Bridge is eligible for the National Register of Historic Places. Demolition of the bridge would therefore result in an adverse effect on a historic property. Caltrans is required to minimize these adverse effects. A Finding of Effects and Memorandum of Agreement detailing the planned mitigation strategy was signed by the FHWA, the State Historic Preservation Officer and Caltrans on June 2005 (see Appendix H). The mitigation plan calls for a Historic American Engineering Record documentation to be created for the Bradley Overhead Bridge. Caltrans would ensure that all documentation be completed and that copies of documentation made available

to the State Historic Preservation Officer and appropriate local archives before the start of project construction. This work would be accomplished by or under the direct supervision of a person or persons meeting the Secretary of the Interior's Professional Qualifications Standards (48 FR 44738-9).

If cultural materials are discovered during construction, all earth-moving activity within and around the immediate discovery area would be diverted until a qualified archaeologist can assess the nature and significance of the find.

If human remains are discovered, State Health and Safety Code Section 7050.5 states that further disturbances and activities shall cease in any area or nearby area suspected to overlie remains, and the County Coroner contacted. Pursuant to Public Resources Code Section 5097.98, if the remains are thought to be Native American, the coroner will notify the Native American Heritage Commission who will then notify the Most Likely Descendent. At this time, the person who discovered the remains will contact the Caltrans Central Region Heritage Resources Branch so that they may work with the Most Likely Descendent on the respectful treatment and disposition of the remains. Further provisions of Public Resources Code 5097.98 are to be followed as applicable.

2.2 Physical Environment

2.2.1 Floodplains

2.2.1.1 Regulatory Setting

Executive Order 11988 (Floodplain Management) directs all federal agencies to refrain from conducting, supporting, or allowing actions in floodplains unless it is the only practicable alternative. The Federal Highway Administration's requirements for compliance are outlined in 23 CFR 650 Subpart A. To comply, the following must be analyzed:

- The practicability of alternatives to any longitudinal encroachments
- Risks of the action
- Impacts on natural and beneficial floodplain values
- Support of incompatible floodplain development
- Measures to minimize floodplain impacts and to preserve/restore any beneficial floodplain values affected by the project.

The 100-year floodplain is defined as "the area subject to flooding by the flood or tide having a one percent chance of being exceeded in any given year." An encroachment is defined as "an action within the limits of the 100-year floodplain."

In accordance with Title 23, Part 650, of the Code of Federal Regulations, a Location Hydraulic Study using National Flood Insurance Maps was performed in the proposed project area to analyze potential impacts to the floodplain.

2.2.1.2 Affected Environment

According to the Federal Emergency Management Agency, the study area is within a 100-year floodplain. The project area falls within an area designated as Zone AO and Zone X. Zone AO is a special flood hazard area that could be inundated by a 100-year flood with depths of 0.30 meter to 0.91 meter (1 to 3 feet). Zone X is an area determined to be outside the 500-year floodplain.

2.2.1.3 Impacts

The existing alignment passes through a variety of "zones" from Marthella Avenue to 0.3 kilometer (1.8 miles) east of Santa Fe Avenue. The proposed project would not change the existing drainage patterns, constrict the flow in a 100-year event or be a longitudinal encroachment into the floodplain.

2.2.1.4 Avoidance, Minimization and/or Mitigation Measures

Roadway hydrology is measured by the increase to the onsite drainage. Two drainage basins (see Figure 8 for the location of the proposed drainage basins) proposed for this project are sized to accept storage from two 10-year, 24-hour storms. The basins would accept the drainage from the high points on the bridge. Drainage from other areas would drain into an existing 0.38-meter (15-inch) line on the west side of the project.

2.2.2 Hydrology, Water Quality, Storm Water Runoff

2.2.2.1 Regulatory Setting

The primary federal law regulating Water Quality is the Clean Water Act. Section 401 of the act requires a water quality certification from the State Board or Regional Board when a project: 1) requires a federal license or permit (a Section 404 permit is the most common federal permit for Caltrans projects), and 2) will result in a discharge to waters of the United States.

Section 402 of the act establishes the National Pollutant Discharge Elimination System permit system for the discharge of any pollutant (except dredge or fill material) into waters of the United States. To ensure compliance with Clean Water Act Section 402 the State Water Resources Control Board has issued a National Pollutant Discharge Elimination System Statewide Storm Water Permit to regulate storm water discharges from Caltrans facilities. The permit regulates storm water discharges from Caltrans right-of-way both during and after construction, as well as from existing facilities and operations.

In addition, the State Water Resources Control Board has issued a construction general permit for most construction activities covering greater than 1 acre (0.40 hectare) that are part of a Common Plan of Development exceeding 5 acres (2.02 hectares) or that have the potential to significantly impair water quality. Some construction activities may require an individual construction permit. All Caltrans projects that are subject to the construction general permit require a Storm Water Pollution Prevention Plan, while all other projects require a Water Pollution Control Program. Subject to Caltrans's review and approval, the contractor prepares both the Storm Water Pollution Prevention Plan and the Water Pollution Control Program. The Storm Water Pollution Prevention Plan and the Water Pollution Control Program identify construction activities that may cause pollutants in storm water and measures to control these pollutants. Since neither the Storm Water Pollution Prevention Plan nor the Water Pollution Control Program is prepared at this time, the following discussion focuses on anticipated pollution controls.

2.2.2.2 Affected Environment

The project lies in the South Valley Floor Hydrologic Area of the San Joaquin River watershed, which drains to the Pacific Ocean via San Francisco Bay. The Central Valley Regional Water Quality Control Board has established water quality objectives for the protection of surface and groundwater in the region. Water quality objectives preserve past, present, and probable future beneficial uses of regional water bodies. These uses include municipal and domestic water supply, water contact recreation, non-contact water recreation, cold freshwater habitat, and warm freshwater habitat. The groundwater resources in the vicinity of the project site have four potential or existing beneficial uses: municipal or domestic supply, agricultural supply, industrial service supply, and industrial process supply.

A small canal lies south of Baker Drive in the project area. The water quality of the canal water according to the Regional Water Quality Control Board is considered good.

2.2.2.3 Impacts

Both Alternatives 1 and 2 would have the same impacts.

Short-term impacts to surface water quality could occur during construction of the project. The primary impacts would occur from exposure of loose soil during excavation, grading, and filling activities during construction. The suspended solids, dissolved solids, and organic pollutants in surface runoff could increase while nearby soils are disturbed and dust is generated. These short-term water quality impacts are minor and would not cause or contribute to the impairment of a designated beneficial use.

No long-term impacts to water quality are anticipated as a result of the proposed project. By implementing a Storm Water Pollution Prevention Plan during construction and a Water Pollution Control Program after construction, no long-term impacts to surface water quality are anticipated as a result of the project.

2.2.2.4 Avoidance, Minimization and/or Mitigation Measures

The Caltrans Statewide National Pollutant Discharge Elimination System Permit No. CAS000003 (SWRCB No. 99-06-DWQ) covers the proposed project. This construction stage permit requires a written Storm Water Pollution Prevention Plan for projects that involve disturbance of more than 2 hectares (5 acres) of native ground, or other projects that could potentially affect streams and freshwater aquifers.

Under the existing permit, if a project is expected to disturb more than 2 hectares (5 acres) of soil, the following is required:

1. A Notification of Construction is to be submitted to the appropriate Regional Water Quality Control Board at least 30 days before construction starts. The Notice of Construction form asks for a tentative start date and the duration, location, and description of the project, estimate of affected area, name of resident engineer (or other construction contact) with telephone number, etc.

2. A Storm Water Pollution Prevention Plan is to be prepared and implemented during construction to the satisfaction of the resident engineer.

3. A Notice of Completion is to be submitted to the Regional Water Quality Control Board upon completion of the construction and stabilization of the site. A project would be complete when the criteria for final stabilization in the State General Construction Permit is met.

During the construction phase, the contractor has the responsibility as stated in Caltrans Standard Specifications Section 7-1.01G for submitting a comprehensive plan outlining steps to eliminate potential impacts during construction. The plan must address and delineate in detail how the contractor intends to alleviate potential impacts to water quality during construction. For this project, the Storm Water Pollution Prevention Plan mentioned in this section would satisfy this requirement.

2.2.3 Hazardous Waste/Materials

2.2.3.1 Regulatory Setting

Hazardous materials and hazardous wastes are regulated by many state and federal laws. These include not only specific statutes governing hazardous waste, but also a variety of laws regulating air and water quality, human health and land use.

The primary federal laws regulating hazardous wastes/materials are the Resource Conservation and Recovery Act of 1976 and the Comprehensive Environmental Response, Compensation and Liability Act of 1980. The purpose of the Comprehensive Environmental Response, Compensation and Liability Act, often referred to as Superfund, is to clean up contaminated sites so that public health and welfare are not compromised. The Resource Conservation and Recovery Act provides for "cradle to grave" regulation of hazardous wastes. Other federal laws include:

- Community Environmental Response Facilitation Act of 1992
- Clean Water Act
- Clean Air Act
- Safe Drinking Water Act
- Occupational Safety & Health Act
- Atomic Energy Act
- Toxic Substances Control Act
- Federal Insecticide, Fungicide, and Rodenticide Act

In addition to the acts listed above, Executive Order 12088—Federal Compliance with Pollution Control—mandates that necessary actions be taken to prevent and

control environmental pollution when federal activities or federal facilities are involved.

Hazardous waste in California is regulated primarily under the authority of the federal Resource Conservation and Recovery Act of 1976 and the California Health and Safety Code. Other California laws that affect hazardous waste are specific to handling, storage, transportation, disposal, treatment, reduction, cleanup and emergency planning.

Worker health and safety and public safety are key issues when dealing with hazardous materials that may affect human health and the environment. Proper disposal of hazardous material is vital if it is disturbed during project construction.

2.2.3.2 Affected Environment

A Preliminary Site Investigation was conducted for the project. Field surveys and record searches (Regional Water Quality Control Board's Leaking Underground Storage Tank Information System, a VISTA database search, and Merced County Department of Environmental Health hazardous waste files) were used to identify potential hazardous waste concerns within the project area. Five potential concerns requiring further study were identified: (1) aerially deposited lead, (2) lead-based paint and asbestos, (3) lead-based paint in soil, (4) underground storage tanks, (5) the railroad right-of-way could potentially have diesel, hydrocarbons, organic compounds, pesticides, and heavy metals in the soil.

An aerially deposited lead investigation along with a heavy metal soil survey was conducted in the Caltrans right-of-way. The aerial lead site investigation determined the concentration of aerially deposited lead from vehicle exhaust in or near surface soils in the project limits. Results of lead studies are used by Caltrans to inform the construction contractor of the presence of lead-affected soil (if encountered) for health, safety, and disposal purposes.

Land use within the project area is mixed with residential, recreational, commercial, and agricultural uses. Many of the buildings within the project area were constructed before 1975 and are likely to contain asbestos and lead-based paint. The Bradley Overhead Bridge could also contain asbestos and lead-based paint.

2.2.3.3 Impacts

Both Alternatives 1 and 2 would have the same impacts.

Aerially Deposited Lead

Aerially deposited lead investigations were divided into two geographic areas: (1) between Anderegg Avenue and Baker Drive, soil generated from the top 0.3 meter (1 foot) would be considered California hazardous waste if disposed of; (2) between Santa Fe Avenue and the end of the project limits, if excavation is performed, the top 0.3 meter (1 foot) of soil should be disposed of as California hazardous waste, or stockpiled separately and re-sampled to confirm total and soluble lead concentrations for waste disposal. Soils excavated from 0.6 meter (2 feet) would be considered non-hazardous for disposal or could be reused or relinquished without restriction.

Lead-based Paint and Asbestos

Test results have also identified asbestos and lead-based paint on the Bradley Overhead Bridge. While lead is present on the Bradley Overhead Bridge, based on the good condition of the paint on the steel girders at the time of the bridge survey, lead-based paint stabilization would not be required.

Samples were collected from the bridge to be analyzed for asbestos-containing materials. The analysis found that the Bradley Overhead Bridge contains asbestos-containing materials.

Lead-Based Paint in Soils

Excess soil generated from the area under the Bradley Overhead Bridge would not require disposal as a Resource Conservation and Recovery Act hazardous waste. However, based on the elevated total and soluble lead concentrations detected in the 0.3-meter (1-foot) sample collected, the top 0.45 meter (1.5 feet) of soil excavated from the middle portion of the area underneath the Bradley Overhead Bridge should be managed and disposed of as a California hazardous waste or stockpiled separately and re-sampled to confirm total and soluble lead concentrations for waste disposal evaluation.

Underground Storage Tanks

Other potential hazardous waste concerns in the project area are underground storage tanks at former gas stations located at 21st Street and State Route 140. Records show that the underground storage tanks were removed from the 21st Street and State Route 140 site in 1978. Two additional parcels have evidence for the potential of former underground storage tanks. The 1990 and 2010 Yosemite Parkway parcels will be investigated for possible hydrocarbon contamination. The Merced County

Environmental Health Department did not have any records regarding the history of the sites.

Railroad Right-of-Way

The soil in the railroad right-of-way could potentially contain diesel, hydrocarbons, organic compounds, pesticides, and heavy metals. The areas near the railroad tracks are non-hazardous. Also, based on the soil analysis results, lower surface levels of soil generated from Area 1 (under the Bradley Overhead Bridge) can be reused onsite and/or disposed of without restrictions.

2.2.3.4 Avoidance, Minimization and/or Mitigation Measures

Aerially Deposited Lead

In the area between Anderegg Avenue and Baker Drive, soil generated from the top 0.3 meter (1 foot) would be considered California hazardous waste if disposed of. Soil generated from top to 0.6 meter (2 feet) would be considered non-hazardous and could be reused or relinquished without restriction.

In the area around Santa Fe Avenue, the top 0.3 meter (1 foot) of soil should be disposed of as California hazardous waste. Soils excavated from the top to 0.6 meter (2 feet) would be considered non-hazardous for disposal or could be reused or relinquished without restriction.

Lead-based Paint

For lead-based paint, soils excavated to a maximum depth of 0.9 meter (3 feet) would likely be classified as non-hazardous. In Area 1, soils can be reused onsite and/or disposed of without restrictions.

Asbestos

Asbestos was found in the gasket material (sheet packing) on the Bradley Overhead Bridge. The asbestos was classified as non-friable, Category 2 material in fair condition. This material would require removal and disposal by a licensed and certified asbestos abatement contractor before the bridge could be demolished.

2.2.4 Air Quality

2.2.4.1 Regulatory Setting

The Clean Air Act as amended in 1990 is the federal law that governs air quality. Its counterpart in California is the California Clean Air Act of 1988. These laws set

standards for the quantity of pollutants that can be in the air. At the federal level, these standards are called National Ambient Air Quality Standards. Standards have been established for carbon monoxide, nitrogen dioxide, ozone, and particulate matter that is 10 microns in diameter or smaller (PM_{10}).

Under the 1990 Clean Air Act Amendments, the U.S. Department of Transportation cannot fund, authorize, or approve federal actions to support programs or projects that are not first found to conform to the Clean Air Act requirements. Conformity with the Clean Air Act takes place on two levels—at the regional level and at the project level. The proposed project must conform at both levels to be approved.

Regional-level conformity is concerned with how well the region is meeting the standards set for the pollutants listed above. At the regional level, Regional Transportation Plans are developed that include all of the transportation projects planned for a region over a period of years, usually 20. Based on the projects included in the Regional Transportation Plan, an air quality model is run to determine whether or not the implementation of those projects would result in a violation of the Clean Air Act. If no violations would occur, then the regional planning organization, such as Merced County Association of Governments and the appropriate federal agencies, such as the Federal Highway Administration, make the determination that the Regional Transportation Plan is in conformity with the Clean Air Act. Otherwise, the projects in the Regional Transportation Plan must be modified until conformity is attained. If the design and scope of the proposed transportation project are the same as described in the Regional Transportation Plan, then the proposed project is deemed to be in conformity at the regional level.

Conformity at the project level is also required for carbon monoxide, nitrous dioxide, ozone and particulate matter that is 10 microns in diameter or smaller. If a region is meeting the standard for a given pollutant, then the region is said to be in "attainment" for that pollutant. If the region is not meeting the standard, then it is designated a "non-attainment" area for that pollutant. Areas that were previously designated as non-attainment areas but have recently met the standard are called "maintenance" areas. If a project is located in a non-attainment or maintenance area for a given pollutant, then additional air quality analysis and reduction measures in regard to that pollutant are required. This is most frequently done for carbon monoxide and PM_{10}.

2.2.4.2 Affected Environment

The project is located in the San Joaquin Valley air basin, which has a subtropical dry summer or Mediterranean climate. Seasonal variation consists of mild winters and warm summers dominated by a persistent high-pressure system known as the Pacific High. This high-pressure system, combined with the confining effect of the mountains that surround the valley, keeps air from moving through the region, making the valley one of the most polluted regions in the country.

The two build alternatives have two different funding sources: the State Highways Operations and Protection Program and the State Transportation Improvement Program. To achieve the ultimate design of a four-lane roadway, funds from these two programs would be split as follows:

- The State Highway Operation and Protection Program would replace the existing bridge (three of five lanes to be built on the ultimate alignment), realign Baker Drive and Santa Fe Avenue, add traffic signals at the intersections of State Route 140/Kelly Avenue and State Route 140/Santa Fe Avenue and construct drainage basins.
- The State Transportation Improvement Program would provide funds for three additional lanes to complete the four-lane roadway, providing two lanes of the five-lane structure, and provide access for the mobile home park.

According to state and federal standards, this area is an attainment area for carbon monoxide. The San Joaquin Valley (including Merced County) is a non-attainment area for ozone and particulate matter ($PM_{2.5}$, PM_{10} or dust). Attainment means that a region is in compliance with established limits for emissions. Non-attainment refers to emissions that exceed established thresholds.

2.2.4.3 Impacts

Both Alternatives 1 and 2 would have the same impacts.

It has been determined that this project would not cause cumulative impacts to the environment related to regional-scale air pollutants (ozone, carbon monoxide, and particulate matter) and would not have adverse impacts on exterior carbon monoxide levels. The proposed project would not worsen any existing $PM_{10,}$ $PM_{2.5}$ and carbon monoxide violations or create new $PM_{10,}$ $PM_{2.5}$ and carbon monoxide violations.

The 2004 Conformity Regional Transportation Plan was found to conform by Merced County Association of Governments on September 2004, and the Federal Highway

Administration and Federal Transit Authority adopted the air quality conformity finding on August 19, 2004. The project is also included in Merced County Association of Governments' financially constrained 2004 Regional Transportation Improvement Program. The Merced County Association of Governments 2004 Regional Transportation Improvement Program was found to conform by the Federal Highway Administration and Federal Transit Authority in October 2004. The design concept and scope of the proposed project is consistent with the project description in the 2004 Regional Transportation Plan, the 2004 Regional Transportation Improvement Program and the assumptions in the Merced County Association of Governments regional emissions analysis.

As a result of the analyses conducted, Caltrans identified the following air pollutants of particular concern at the project level: particulate matter less than 10 microns. The local effects of this project for concentrations of particulate matter less than 10 microns and less then 2.5 microns must be considered to see if a hot-spot analysis is required before determining if the project conforms to state and federal standards.

Particulate Matter Hot Spot Analysis (PM10 and PM2.5)

The project lies in a non-attainment area for the federal suspended particulate matter standard, so the project is subject to hot spot analysis requirements for suspended particulate matter. The project would improve the level of service and reduce overall idling time in the project area. Based on this information, the project would not contribute to a suspended particulate matter hot spot that would cause or contribute to violations of the National Ambient Air Quality Standard for suspended particulate matter.

During construction, the project would generate air pollutants. Exhaust from construction equipment contains hydrocarbons, oxides of nitrogen, carbon monoxide, suspended particulate matter, and odors. However, most of pollutants would be windblown dust generated during excavation, grading, hauling and various other activities. The impacts of these activities would vary each day as construction progresses. Dust and odors at some residences could cause occasional annoyance and complaint.

2.2.4.4 Avoidance, Minimization and/or Mitigation Measures

No mitigation measures are required for long-term operational air quality effects.

Caltrans Standard Specifications' Section 7-1.01F of "Air Pollution Control" and Section 10, "Dust Control," require the contractor to comply with regulations

established by the San Joaquin Valley Unified Air Pollution Control District to reduce dust emissions during construction.

Before begining of construction, a dust control plan would be submitted to the Air Pollution Control District (Rule 8021). The rule identifies the fugitive dust sources at the construction site and describes all of the fugitive dust control measures that would be implemented before, during, and after any dust-generating activity for the duration of the project. Construction activities cannot begin until the dust control plan has been approved or conditionally approved. The provisions of this rule adopted on November 15, 2001 were in effect until October 1, 2004 when amendments adopted on August 19, 2004 took effect.

2.2.5 Noise

2.2.5.1 Regulatory Setting

The National Environmental Policy Act of 1969 and the California Environmental Quality Act provide the broad basis for analyzing and abating highway traffic noise effects. The intent of these laws is to promote the general welfare and to foster a healthy environment.

For highway transportation projects with Federal Highway Administration involvement, the Federal-Aid Highway Act of 1970 and the associated implementing regulations (23 CFR 772) govern the analysis and abatement of traffic noise impacts. The regulations require that potential noise impacts in areas of frequent human use be identified during the planning and design of a highway project. The regulations contain noise abatement criteria that are used to determine when a noise impact would occur. The noise abatement criteria differ depending on the type of land use under analysis. For example, the noise abatement criteria for residences [67 decibels (dBA)] is lower than the noise abatement criteria for commercial areas (72 dBA). Table 10 lists the noise abatement criteria.

Table 10 Activity Categories and Noise Abatement Criteria

Activity Category	NAC, Hourly A-Weighted Noise Level, dBA $L_{eq}(h)$	Description of Activities
A	57 Exterior	Lands on which serenity and quiet are of extraordinary significance and serve an important public need and where the preservation of those qualities is essential if the area is to continue to serve its intended purpose
B	67 Exterior	Picnic areas, recreation areas, playgrounds, active sport areas, parks, residences, motels, hotels, schools, churches, libraries, and hospitals
C	72 Exterior	Developed lands, properties, or activities not included in Categories A or B above
D	--	Undeveloped lands
E	52 Interior	Residence, motels, hotels, public meeting rooms, schools, churches, libraries, hospitals, and auditoriums

In accordance with Caltrans's *Traffic Noise Analysis Protocol for New Highway Construction and Reconstruction Projects, October 1998*, a noise impact occurs when the future noise level with the project results in a substantial increase in noise level (defined as a 12-dBA or more increase) or when the future noise level with the project approaches or exceeds the noise abatement criteria. Approaching the noise abatement criteria is defined as coming within 1 dBA of the noise abatement criteria.

If it is determined that the project will have noise impacts, then potential abatement measures must be considered. Noise abatement measures that are determined to be reasonable and feasible at the time of final design are incorporated into the project plans and specifications. This document discusses noise abatement measures that would likely be incorporated in the project.

Caltrans's *Traffic Noise Analysis Protocol* sets forth the criteria for determining when an abatement measure is reasonable and feasible. A minimum 5-dBA reduction in the future noise level must be achieved for an abatement measure to be considered feasible. Other considerations include topography, access requirements, other noise sources and safety considerations. The reasonableness determination is basically a cost-benefit analysis. Factors used in determining whether a proposed noise abatement measure is reasonable include: residents' acceptance, the absolute noise level, build versus existing noise, environmental impacts of abatement, public and local agencies input, newly constructed development versus development pre-dating 1978 and the cost per benefited residence.

2.2.5.2 Affected Environment

Traffic noise impacts occur when there is a substantial noise increase (12 dBA [decibels measured on the A-scale of a sound meter] or more than existing conditions) or when predicted noise levels approach or exceed noise abatement criteria (Table 10). The noise abatement criterion for Category B receptors (which includes residences, parks, schools and churches, and outdoor recreational facilities) is 67 Leq (1-hour A-weighted equivalent sound level). The noise abatement criterion for Category C (which includes developed lands, properties, or activities not included in Categories A or B) is 72 Leq. See also Table 11 for a description of typical noise levels in every day life.

Table 11 Typical Noise Levels

COMMON OUTDOOR ACTIVITIES	NOISE LEVEL dBA	COMMON INDOOR ACTIVITIES
	---110---	Rock Band
Jet Fly-over at 300 m (1000 ft)		
	---100---	
Gas Lawn Mower at 1 m (3 ft)		
	---90---	
Diesel Truck at 15 m (50 ft), at 80 km/hr (50 mph)		Food Blender at 1 m (3 ft)
	---80---	Garbage Disposal at 1 m (3 ft)
Noisy Urban Area, Daytime		
Gas Lawn Mower, 30 m (100 ft)	---70---	Vacuum Cleaner at 3 m (10 ft)
Commercial Area		Normal Speech at 1 m (3 ft)
Heavy Traffic at 90 m (300 ft)	---60---	
		Large Business Office
Quiet Urban Daytime	---50---	Dishwasher Next Room
Quiet Urban Nighttime	---40---	Theater, Large Conference Room (Background)
Quiet Suburban Nighttime		
	---30---	Library
Quiet Rural Nighttime		Bedroom at Night, Concert Hall (Background)
	---20---	
		Broadcast/Recording Studio
	---10---	
Lowest Threshold of Human Hearing	---0---	Lowest Threshold of Human Hearing

2.2.5.3 Impacts

Alternatives 1 and 2 would have very similar impacts. Existing exterior noise levels were measured at 14 locations (Figure 14) that represented the surrounding area. Future noise levels were predicted at these locations (noise receptors) using the

hourly traffic volumes for the design year 2027 to determine if the project would have traffic noise impacts.

Table 12 shows the existing and predicted noise levels (for no-build and build alternatives) of each noise receptor tested in the project area. Receptors 2, 3, 6, 7, 8a, 8b, 9, 10, 11, and 12 would not experience substantial noise level increase, nor would the predicted noise levels approach or exceed the noise abatement criterion of 67 dBA for residential developments or 72 dBA for commercial developments. Therefore, no abatement is required.

Receptor 1 (commercial development) would see the predicted noise level approach the noise abatement criterion of 72 dBA. However, noise abatement is not considered reasonable for commercial developments. Therefore, no soundwall or other abatement measures are recommended at this time.

Receptor 4 (a church) shows an existing exterior noise level of 64 dBA. The interior noise level should be 20 dBA less than the exterior noise level, which brings the existing noise level down to 44 dBA. Predicted future noise levels were calculated to be 70 dBA for the exterior and 50 dBA for the interior. Both (exterior and interior) noise levels require the consideration of noise abatement measures. However, the church sits at the corner of an intersection (Edwards Avenue and State Route 140), making a soundwall infeasible because of access requirements. Therefore, no soundwall is recommended.

Receptor 5 represents the apartment complex on the north side of State Route 140. Noise levels would increase from the existing 68 dBA to 69 dBA in the year 2027, resulting in a level above the noise abatement criteria of 67 dBA for residential units. However, if a soundwall were placed in front of the apartment complex, it would block access. Gaps in the soundwall required to give the tenants access to the complex would make the soundwall ineffective. Therefore, no soundwall is recommended at this location.

Receptor 8 is located at the northern end of the Sierra Portal Mobile Home Park adjacent to State Route 140. The noise study indicates that future noise levels at this location would increase to 67 dBA with the build alternatives, resulting in a noise level at the 67-dBA threshold for residential areas. A soundwall placed on top of the safety shape barrier on the bridge would bring future noise levels down by 8 dBA. Preliminary calculations show that a soundwall would be reasonable at this location and is therefore recommended for the Sierra Portal Mobile Home Park.

Refer to Table 12 for noise levels at each location and whether a soundwall is recommended.

Table 12 Noise Modeling Results

Receptor	Type of Development	Noise Abatement Criteria Leq(h)	Existing Noise (Leq, dBA)	Predicted Noise Levels (2027) without project	Predicted Noise Levels (2027) with project	Soundwall Proposed
1	Commercial	72	69	72	72	No
2	Residential	67	57	62	62	No
3	Commercial	72	64	70	70	No
4	Church	67	64	70	70	No
5	Apartments	67	68	69	69	No
6	Church	67	59	63	63	No
7	Residential	67	55	61	61	No
8	Residential	67	65	66	67	Yes
8a	Residential	67	56	58	58	No
8b	Residential	67	53	54	55	No
9	Commercial	72	66	70	70	No
10	Commercial	72	68	70	70	No
11	Commercial	72	68	68	68	No
12	Apartments	67	60	62	62	No

2.2.5.4 Avoidance, Minimization and/or Abatement Measures

Based on the studies completed to date, Caltrans and the Federal Highway Administration intend to incorporate noise abatement in the form of a barrier at Receptor 8, which represents the first row of mobile homes in the Sierra Portal Mobile Home Park. The soundwall would be placed on top of the safety shape barrier on the bridge, measuring 221 meters (725 feet) in length and 1.8 meters (6 feet) in height. Calculations based on preliminary design data indicate that the barrier would reduce noise levels by 8 dBA for 10 residences at a cost of $98,000.

If during final design conditions have substantially changed, noise abatement may not be necessary. The final decision for noise abatement would be made at completion of the project design and the public involvement processes.

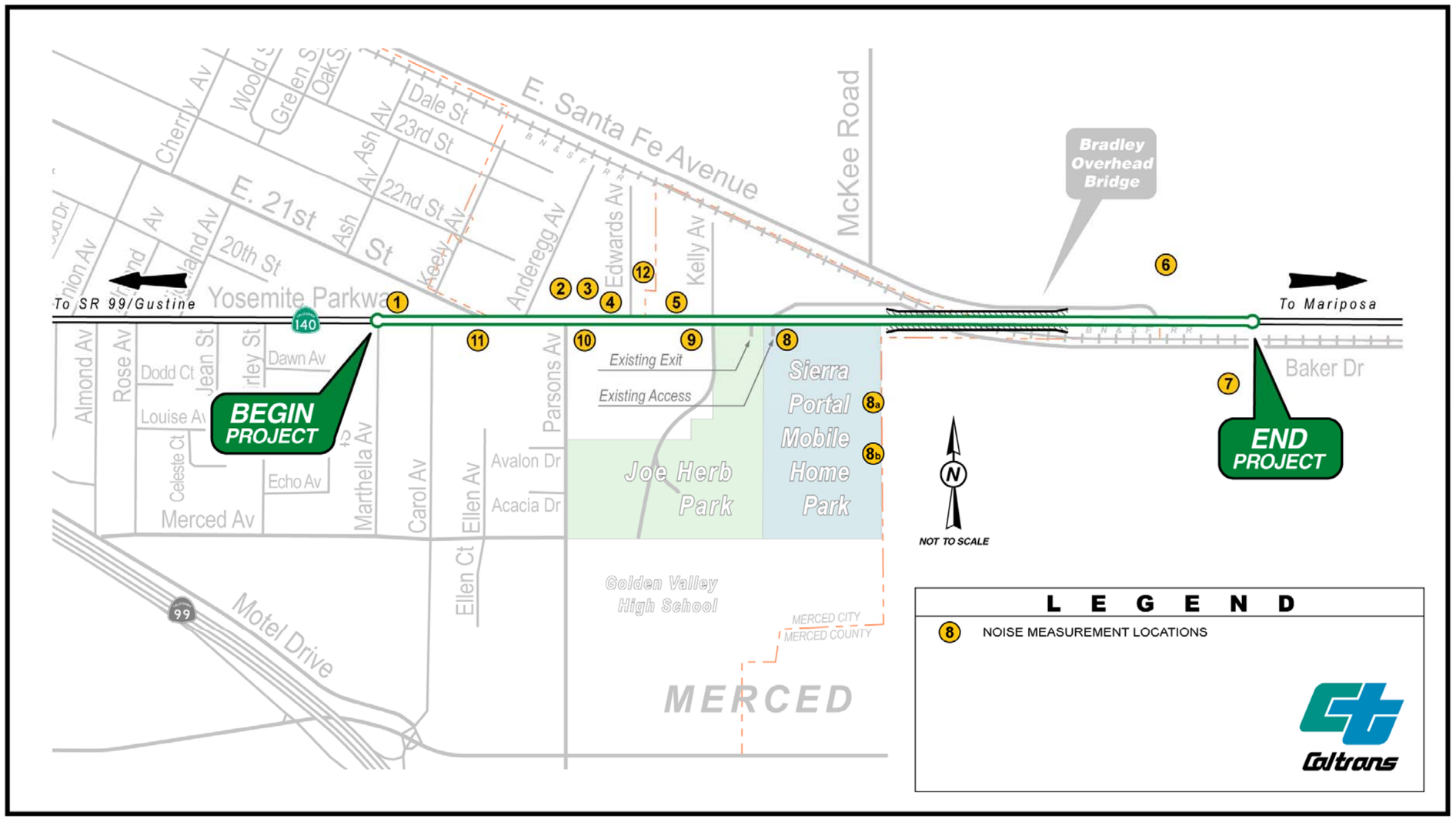


Figure 14 Noise Receptor Locations

2.3 Biological Environment

2.3.1 Animal Species

2.3.1.1 Regulatory Setting

Many state and federal laws regulate impacts to wildlife. The U.S. Fish and Wildlife Service, the National Marine Fisheries Service and the California Department of Fish and Game are responsible for implementing these laws. This section discusses potential impacts and permit requirements associated with wildlife not listed or proposed for listing under the state or federal Endangered Species Act. Species listed or proposed for listing as threatened or endangered are discussed in Section 2.3.2. All other special-status animal species are discussed here, including California Department of Fish and Game fully protected species and species of special concern, and U.S. Fish and Wildlife Service or National Marine Fisheries Service candidate species.

Federal laws and regulations pertaining to wildlife include the following:

- National Environmental Policy Act
- Migratory Bird Treaty Act
- Fish and Wildlife Coordination Act

State laws and regulations pertaining to wildlife include the following:

- California Environmental Quality Act
- Sections 1601 – 1603 of the Fish and Game Code
- Section 2081 of the Fish and Game Code
- Section 4150 and 4152 of the Fish and Game Code

2.3.1.2 Affected Environment

The predominant habitat types within the project area are urban zones, rural residences, and areas that lie within the Burlington Northern & Santa Fe Railroad and Caltrans right-of-ways. The remaining acreage consists of former agricultural fields (now fallow and weedy), a horse pen with no vegetation, and an irrigated parcel used for cattle grazing.

According to sensitive species database lists obtained from the U.S. Fish and Wildlife Service and the California Department of Fish and Game, a total of 55 special-status species occur, or demonstrate the potential to occur, within the U.S. Geological Survey Merced quadrangle map.

2.3.1.3 Impacts

No special-status species have been observed during wildlife surveys (October 21, 2000, April 10, 2001, and October 23, 2001). However, large trees are present in the project area that can be used by migratory birds for nesting.

2.3.1.4 Avoidance, Minimization and/or Mitigation Measures

The presence of trees suitable for nesting birds requires protection measures for migratory birds to be included in the contract special provisions. If construction occurs during the spring and summer months (March 1 through September 1), pre-construction nest site surveys would be required for nesting birds. In addition, if nests are observed, construction associated with the removal of trees would be postponed until September 1. To prevent potential construction delays, it is recommended that trees be removed outside of the nesting season.

2.3.2 Threatened and Endangered Species

2.3.2.1 Regulatory Setting

The primary federal law protecting threatened and endangered species is the Federal Endangered Species Act: United States Code, Section 1531, et seq. See also 50 CFR Part 402. This act and subsequent amendments provide for the conservation of endangered and threatened species and the ecosystems upon which they depend. Under Section 7 of this act, federal agencies, such as the Federal Highway Administration, are required to consult with the U.S. Fish and Wildlife Service and the National Marine Fisheries Service to ensure that they are not undertaking, funding, permitting or authorizing actions likely to jeopardize the continued existence of listed species or destroy or adversely modify designated critical habitat. Critical habitat is defined as geographic locations critical to the existence of a threatened or endangered species. The outcome of consultation under Section 7 is a Biological Opinion or an incidental take statement. Section 3 of the Federal Endangered Species Act defines take as “harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect or any attempt at such conduct.”

California has enacted a similar law at the state level, the California Endangered Species Act, California Fish and Game Code, Section 2050, et seq. The California Endangered Species Act emphasizes early consultation to avoid potential impacts to rare, endangered, and threatened species and to develop appropriate planning to offset project-caused losses of listed species populations and their essential habitats. The California Department of Fish and Game is the agency responsible for implementing

the California Endangered Species Act. Section 2081 of the Fish and Game Code prohibits "take" of any species determined to be an endangered species or a threatened species. "Take" is defined in Section 86 of the Fish and Game Code as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill." The California Endangered Species Act allows for take incidental to otherwise lawful development projects; for these actions, an incidental take permit is issued by the California Department of Fish and Game. For projects requiring a Biological Opinion under Section 7 of the Federal Endangered Species Act, the California Department of Fish and Game may also authorize impacts to the California Endangered Species Act species by issuing a Consistency Determination under Section 2080.1 of the Fish and Game Code.

2.3.2.2 Affected Environment

The pre-survey investigation consisted of reviewing databases and obtaining lists of special-status species that may occur in the project area. A comprehensive species list was compiled using information provided by the U.S. Fish and Wildlife Service (see Appendix F), the California Natural Diversity Database, and the California Native Plant Society Electronic Inventory.

Surveys for listed species were conducted on foot within the project area on October 21, 2000, April 10, 2001, and October 23, 2001. Surveys for the San Joaquin kit fox were conducted between September 3-18, 2002 following survey protocol outlined in the U.S. Fish and Wildlife Service, San Joaquin Kit Fox Survey Protocol for the Northern Range (U.S. Fish and Wildlife Service, June 1999).

2.3.2.3 Impacts

No special-status species were observed during the surveys within the project area. However, since sightings of the San Joaquin kit fox, a federal endangered and state threatened species, are documented within 16 kilometers (10 miles) of the project (near the University of California Merced campus and the San Luis National Wildlife Refuge in Los Banos), the U.S. Fish and Wildlife Service has determined that the proposed Bradley Overhead Replacement and Widening project is likely to *adversely affect* the San Joaquin kit fox. Both build alternatives would permanently remove 0.98 hectare (2.43 acres) and temporarily disturb 0.28 hectare (0.70 acre) of habitat suitable for the San Joaquin kit fox.

2.3.2.4 Avoidance, Minimization and/or Mitigation Measures

On January 12, 2005, the U.S. Fish and Wildlife Service issued a Biological Opinion stating that Caltrans would have to purchase credits equivalent to 1.13 hectares (2.78 acres) of habitat suitable for the San Joaquin kit fox that have been approved by the U.S. Fish and Wildlife Service to mitigate for loss of suitable kit fox habitat.

To minimize the effects of the proposed project, Caltrans would (1) conduct pre-construction surveys prior to ground disturbance to search for San Joaquin kit fox dens within the impact area; (2) conduct a meeting and training on the San Joaquin kit fox for construction personnel prior to groundbreaking activities; (3) adhere to contract special provisions during construction; and (4) conduct construction activities during daytime hours to avoid potential disruption of San Joaquin kit fox nocturnal activities. Details and additional measures are listed in the Biological Opinion dated January 12, 2005.

2.3.2.5 Cumulative Impacts

No city or county projects are currently scheduled in the project area. Projects in the greater vicinity of the proposed project would provide mitigation for impacts to biological resources. The proposed project would mitigate for a total of 1.13 hectares (2.78 acres) of kit fox habitat for this project, a relatively small amount compared to development for the project area. Therefore, due to the small amount of impacts, the location of the project (commercial and residential area) and the mitigation measures proposed in the Biological Opinion, no cumulative effects are anticipated to the San Joaquin kit fox foraging habitat for this project.

2.3.3 Invasive Species

2.3.3.1 Regulatory Setting

On February 3, 1999, President Bill Clinton signed Executive Order 13112 requiring federal agencies to combat the introduction or spread of invasive species in the United States. The order defines invasive species as “any species, including its seeds, eggs, spores, or other biological material capable of propagating that species, that is not native to that ecosystem whose introduction does or is likely to cause economic or environmental harm or harm to human health.” Federal Highway Administration guidance issued August 10, 1999 directs the use of the state’s noxious weed list to define the invasive plants that must be considered as part of the National Environmental Policy Act analysis for a proposed project.

2.3.3.2 Affected Environment

The entire project area has been previously disturbed and includes urban area, rural residences, Caltrans right-of-way, railroad right-of-way and currently fallow and weedy fields. Non-native, invasive grasses dominate vegetation in the Caltrans and railroad right-of-way. Both right-of-ways are subject to landscape maintenance activities, including vegetation mowing.

2.3.3.3 Impacts

Due to construction activities, small populations of non-native, invasive grasses would be removed within the project site.

2.3.3.4 Avoidance, Minimization and/or Mitigation Measures

None of the species on the California list of noxious weeds is currently used by Caltrans for erosion control or landscaping in Merced County.

In compliance with the Executive Order on Invasive Species (Executive Order 13112) and subsequent guidance from the Federal Highway Administration, the landscaping and erosion control included in the project would not use species listed as noxious weeds. In areas of particular sensitivity, extra precautions would be taken if invasive species are found in or adjacent to the construction areas. These include the inspection and cleaning of construction equipment and eradication strategies to be implemented should an invasion occur.

Chapter 3 California Environmental Quality Act (CEQA) Evaluation

3.1 Determining Significance Under CEQA

The proposed project is a joint project by the Caltrans and the Federal Highway Administration and is subject to state and federal environmental review requirements. Project documentation, therefore, has been prepared in compliance with both the California Environmental Quality Act and the National Environmental Policy Act. Caltrans is the lead agency under the California Environmental Quality Act, and the Federal Highway Administration is lead agency under the National Environmental Policy Act.

One of the primary differences between the National Environmental Policy Act and the California Environmental Quality Act is the way significance is determined. Under the National Environmental Policy Act, significance is used to determine whether an Environmental Impact Statement, or some lower level of documentation, would be required. The National Environmental Policy Act requires that an Environmental Impact Statement be prepared when the proposed federal action (project) as a whole has the potential to "significantly affect the quality of the human environment." The determination of significance is based on context and intensity. Some impacts determined to be significant under the California Environmental Quality Act may not be of sufficient magnitude to be determined significant under the National Environmental Policy Act. Under the National Environmental Policy Act, once a decision is made regarding the need for an Environmental Impact Statement, it is the magnitude of the impact that is evaluated and no judgment of its individual significance is deemed important for the text. The National Environmental Policy Act does not require that a determination of significant impacts be stated in the environmental documents.

The California Environmental Quality Act, on the other hand, does require Caltrans to identify each "significant effect on the environment" resulting from the project and ways to mitigate each significant effect. If the project may have a significant effect on any environmental resource, then an Environmental Impact Report must be prepared. Each and every significant effect on the environment must be disclosed in the Environmental Impact Report and mitigated if feasible. In addition, the California Environmental Quality Act Guidelines list a number of mandatory findings of

significance, which also require the preparation of an Environmental Impact Report. There are no types of actions under the National Environmental Policy Act that parallel the findings of mandatory significance of the California Environmental Quality Act.

As stated above, some impacts determined to be significant under the California Environmental Quality Act may not lead to a determination of significance under the National Environmental Policy Act. Because the National Environmental Policy Act is concerned with the significance of the project as a whole, it is quite often the case that a "lower level" document is prepared for the National Environmental Policy Act. One of the most commonly seen joint document types is an Environmental Impact Report/Environmental Assessment, which this document is.

3.2 Discussion of Significant Impacts

3.2.1 Significant Environmental Effects of the Proposed Project

- Replacement of the historic Bradley Overhead Bridge (see Section 2.1.8 and Appendix B)
- Elevated noise levels in the project area (see Section 2.2.6)

3.2.2 Unavoidable Significant Environmental Effects

Historic Resources

The Bradley Overhead Bridge was identified to be eligible for inclusion in the National Register of Historic Places because it was the first arc-welded steel girder bridge in California and served as an important element of the "All-Year Highway" to Yosemite. Because the proposed project would demolish the Bradley Overhead Bridge, the impact is considered significant under the California Environmental Quality Act. An analysis is shown in the "Section 4(f) Evaluation" in Appendix B and Section 2.1.8 (Historical Resources and Archaeological Preservation) and describes how Caltrans developed alternatives to avoid the destruction of the bridge. However, none of these alternatives were deemed feasible, and it was apparent during coordination with the State Historic Preservation Officer, local agencies and the public that there was no local support for maintaining the existing structure.

Noise

Increases in traffic would cause elevated future noise levels in the project area. Noise levels for Receptor 5, located in front of an apartment complex on the north side of

State Route 140, could not be mitigated. Future noise levels would increase from the existing 68 dBA to 69 dBA in the year 2027, resulting in a level above the noise abatement criteria of 67 dBA for residential units. However, if a soundwall were placed in front of the apartment complex, it would block access. Gaps would be required to give the tenants access to the complex, which would make the soundwall ineffective.

Receptor 1 (commercial development) would see the predicted noise levels approach the noise abatement criterion of 72 dBA. However, noise abatement is not considered reasonable for commercial developments.

Receptor 4 (a church) shows an existing exterior noise level of 67 dBA. Predicted noise levels were found to be 70 dBA for the exterior and 50 dBA for the interior. Both (exterior and interior) noise levels require the consideration of noise abatement measures. However, the church sits at the corner of an intersection (Edwards Avenue and State Route 140), making a soundwall infeasible because of access requirements.

Therefore, no soundwalls are recommended at these locations.

Receptor 8 is located at the Sierra Portal Mobile Home Park, and the noise study indicates that future noise levels at this location would increase to 67 dBA, meeting the noise abatement criteria for consideration of noise abatement measures. A 6-foot soundwall placed on top of the safety shape barrier would bring future noise levels down by 8 dBA.

3.3 Mitigation Measures for Significant Impacts Under the California Environmental Quality Act

Historic Resources

The Findings of Effects and Memorandum of Agreement detailing the planned mitigation strategy was signed by all parties (the Federal Highway Administration, State Historic Preservation Officer and Caltrans) on June, 13, 2005. A Historic American Buildings Survey/Historic American Engineering Record would be sent to the National Park Service. Caltrans would ensure that all documentation be completed and accepted by the Historic American Buildings Survey/Historic American Engineering Record before the start of project construction and that copies of documentation be made available to the State Historic Preservation Officer and appropriate local archives designated by the State Historic Preservation Officer. This

mitigation plan is incorporated into the Memorandum of Agreement to lessen the effects of the proposed project on the National Register-eligible site.

Noise

Noise abatement measures (a soundwall) are proposed for Receptor 8, which represents the first row of homes in the Sierra Portal Mobile Home Park. Initial calculations determined that a soundwall would not only reduce the noise levels by 8 dBA, but would also be reasonable and feasible. Therefore, it is proposed to place a soundwall on top of a safety shape barrier, which would be located on the Bradley Overhead Bridge. Together, the safety barrier and soundwall would measure 1.8 meters (6 feet) in height.

Chapter 4 Comments and Coordination

Early and continuing coordination with the general public and appropriate public agencies is an essential part of the environmental process to determine the scope of environmental documentation, the level of analysis, potential impacts and mitigation measures and related environmental requirements. Agency consultation and public participation for this project have been accomplished through a variety of formal and informal methods, including project development team meetings, interagency coordination meetings and public meetings. This chapter summarizes the results of Caltrans' efforts to identify, address and resolve project-related issues through early and continuing coordination.

Coordination with Public Agencies

Coordination and consultation throughout the project development process included the following agencies:

Merced County Association of Governments

The Merced County Association of Governments participated in Project Development Team meetings held throughout the project development process.

City of Merced

The City of Merced participated in Project Development Team meetings held throughout the project development process.

State Historic Preservation Officer

Caltrans and the Federal Highway Administration consulted with the State Historic Preservation Officer representative regarding the eligibility of cultural resources. The State Historic Preservation Officer concurred with the findings on December 18, 2001.

Consequently, Caltrans submitted a Finding of Effects package with a Draft Memorandum of Agreement outlining Caltrans' responsibility regarding the mitigation for the demolition of the historic Bradley Overhead Bridge. The Memorandum of Agreement among the State Historic Preservation Officer, Federal Highway Administration and Caltrans was signed in June 13, 2005.

U.S. Fish and Wildlife Service

The U.S. Fish and Wildlife Service reviewed potential impacts to endangered species, provided a liaison for formal and informal consultation, and issued a Biological Opinion on January 12, 2005.

The Federal Highway Administration and Caltrans closely coordinated with the U.S. Fish and Wildlife Service regarding potential impacts to endangered species and during formal and informal consultation. The following are the major coordination dates during the process: Caltrans submitted a San Joaquin kit fox Impact Assessment to the U.S. Fish and Wildlife Service (August 2001) and received a "likely to adversly affect" determination in October 2004. The U.S. Fish and Wildlife Service issued a Biological Opinion for the San Joaquin kit fox on January 12, 2005.

California Department of Fish and Game

The California Department of Fish and Game reviewed potential impacts to endangered species and 1600 Streambed Alteration Agreement requirements.

Public Participation

Open House (May 8, 2001)

An Open House/Public Information Meeting was held on May 8, 2001. The general public was notified of this open house through newspaper advertisements. In addition, a notice was mailed directly to property owners in the project area. The public input was considered in the process of eliminating some of the proposed alternative alignments from further consideration. The meeting also helped identify issues to be addressed in the environmental review process.

The Open House/Public Information Meeting was held at Merced Civic Center in the Sam Pipes Room. Aerial maps showing the project alternatives were placed on tables for review. Information easels with maps, graphics, and display boards were located around the room. The display boards provided information on project costs, schedules, and environmental issues. Caltrans staff was available to answer questions and address concerns of the approximately 100 local property owners and interested parties who attended the meeting.

At the meeting, 95 comment cards were received, focusing on the following issues:

- noise
- drainage issues
- evaluation of property values
- curbs and gutters

The majority of people who attended the Open House were not in favor of alternatives other than the two build alternatives for the following reasons: they would affect too many people, would not solve the current problem, and they would remove too many homes.

Public Input and Comments Received

Of the input received from interested individuals during the public comment period, 120 supported the project, with 44 favoring Alternative 1, six favoring Alternative 2, and one person favoring the Southern Alternative, which was considered but withdrawn by the Project Development Team.

The existing Bradley Overhead structure is not viewed favorably by the local community. Instead of being seen as part of the historic fabric of the community, the Bradley Overhead Bridge is viewed as an unsafe eyesore and a reminder of the many accidents that have occurred over this section of road. A total of 34 written comments were received specifically requesting that the old bridge be torn down. Eight people mentioned that they personally did not consider the bridge historic. This information was considered in the review process of the environmental document.

Public Hearing Held on January 28, 2004

Caltrans held a public hearing for the Bradley Overhead Replacement Project at the Merced Civic Center on Wednesday, January 28, 2004 from 4:00 p.m. to 7:00 p.m. The public hearing was publicized through a direct mail announcement to approximately 300 property owners, residents, local businesses, public agencies and other interested parties. Caltrans sent letters of invitation to federal, state, and local elected officials. A public notice for the public hearing appeared in *The Merced Sun-Star* on December 27, 2003 and January 21, 2004.

Approximately 65 residents and interested parties attended the public hearing. Caltrans distributed to each attendee an information sheet, with a project map illustrating the project location, description, project cost and purpose, background information, funding sources, and a project timeline. Caltrans explained the format of

the public hearing and attendees were encouraged to ask questions of the project team and express concerns verbally to a court reporter or through written comment cards.

Caltrans received eight comments via written comment cards, one formal letter from an interested party and six comments recorded by the court reporter. A majority of comments were in support of the project and expressed gratitude for the opportunity to provide input on the process.

Subsequent Community Meeting Held on February 18, 2004

A subsequent informal community meeting was held for the proposed project at the Sierra Portal Mobile Home Park on Wednesday, February 18, 2004 from 1:00 p.m. to 4:00 p.m. This meeting was specifically arranged to present the information that was shown at the public hearing to residents of the Sierra Mobile Home Park. Approximately 35 residents and interested parties attended. Caltrans distributed to each attendee the same information used for the formal public hearing. Attendees were encouraged to ask questions and express concerns through verbal comments to staff and on written comment cards.

Caltrans received eight written comments from this meeting. A majority of comments were in support of the project and expressed gratitude for the opportunity to provide input on the process.

Opportunity for a Public Hearing

Following the circulation (January 14, 2004 to February 28, 2004) of the Draft Environmental Impact Report, the Federal Highway Administration determined that the preparation of an Environmental Assessment was necessary based on the impacts of the proposed project on the two Section 4(f) properties (Bradley Overhead Bridge and Joe Herb Park), impacts on business and/or residential properties, the required permanent easement to realign the access to the adjacent mobile home park and effects on the San Joaquin Valley kit fox.

Comments received during the previous public comment period and the public hearing (January 28, 2004 and February 18, 2004) have been considered and incorporated into this document, as appropriate. An additional opportunity for a public hearing and for public input will be given during the circulation period of this environmental document.

Chapter 5 List of Preparers

This Environmental Impact Report/Environmental Assessment was prepared by the Central Region of the California Department of Transportation (Caltrans). The following Caltrans staff prepared this report:

Allam Alhabaly, Environmental Engineer (Air and Noise). B.S., Industrial Engineering, California State University, Fresno; 4 years environmental technical studies experience. Contribution: Environmental Engineer.

Mike Bettega, Transportation Engineer. B.A., Economics, University of California, Los Angeles; Electrical Engineering and Computer Science, University of California, Berkeley; 28 years experience in private sector (construction); 2 years experience in Transportation Engineering. Contribution: Hydraulics.

Christopher Brewer, Associate Environmental Planner (Architectural History). M.A., Public Administration, California State University, Bakersfield; 19 years experience in architectural history. Contribution: Architectural history surveying.

Rajeev L. Dwivedi, Associate Engineering Geologist. Ph.D., Environmental Engineering, Oklahoma State University, Stillwater; 15 years environmental technical studies experience. Contribution: Water Quality.

Geoffrey Gray, Environmental Planner. M.A., Environmental Science/Ecology, California State University, Fresno; B.S., Business Administration, California State University, Fresno; 7 years biological resource instruction, research, impact assessment experience. Contribution: Biologist.

Craig Hansen, Right-of-Way Agent. B.A., Mass Communication, California State University, Fresno; 5 years experience in surveying and 6 years in right-of-way. Contribution: Right-of-way agent.

Peter Hansen, Environmental Planner. B.S., Geology, California State University, Fresno; 2 years hazardous waste experience; 2 years paleontology/geology experience. Contribution: Hazardous Waste and Paleontology studies.

Edward A. Hibbs, Associate Landscape Architect. B.S., Landscape Architecture, California Polytechnic State University, San Luis Obispo; A.A., Architecture, Rio Hondo College; licensed Landscape Architect; more than 28 years of experience in landscape architecture. Contribution: Visual Resources, Erosion Control and Landscape Architectural recommendations.

Ranjeev Kumar, Transportation Engineer. M.S., Civil Engineering (structural engineering), South Dakota School of Mines and Technology; M.S., Civil Engineering, Bangalore University, India; Bachelor of Civil Engineering, Bangalore University, India. 12 years of experience with project engineering. Contribution: Project Engineer.

Edna McCoy, Assistant Caltrans Administrator; 23 years experience in administration including 11 years experience with Caltrans. Contribution: Right-of-way.

Saeid Mehrtash, Transportation Engineer. B.S., Civil Engineering, California State University, Fresno; 5 years experience with Caltrans. Contribution: Design Engineer.

Ram Narayan Gupta, Project Manager. M.B.A., Business Administration, University of Nevada-Reno; B.S., Civil Engineering, Indian Institute of Technology; more than 16 years of experience in project management, contract administration, construction management, budgeting, development of technical and business reports, teaching, bridge design and analysis. Contribution: Project Manager.

Steve Sakata, P.E. Senior Transportation Engineer. B.S., Civil Engineering, California State University, Fresno; 17 years experience with Caltrans; currently with the Project Development Department - Design Manager Contribution: Design Engineer.

Vickie Traxler, Senior Environmental Planner. M.S., Regional Resource Planning, Colorado State University; B.S., Environmental Science, Grand Valley State Colleges; 9 years experience in resource planning. Contribution: Environmental Unit Supervisor.

Juergen Vespermann, Associate Environmental Planner. Civil Engineering Degree, Fachhochschule Muenster, Germany; 16 years transportation

planning/environmental planning experience. Contribution: Document Writer/Environmental Project Coordinator.

Gordon Watkins, Associate Right-of-Way Agent. B.S., Real Estate and Urban Land Economics, California State University, Fresno; 10 years experience in land planning and economics. Contribution: Draft Relocation Impact Report.

John Whitehouse, Environmental Planner. California State University, San Diego; 15 years archaeology experience as Environmental Planner (Archaeologist). Contribution: Environmental planner and cultural resources.

Winter Yeung, Transportation Engineer. B.S., Civil Engineering, California State University, Fresno; 4 years experience in Project Development. Contribution: Project Engineer.

Chapter 6 Distribution List

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State Clearinghouse
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P.O. Box 3004
Sacramento, CA 95812-3044

Department of Conservation
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Sacramento, CA 95814

Calif. Dept. of Fish & Game
Fisheries, Wildlife & Environmental Programs
1701 Nimbus Road, Suite A
Rancho Cordova, CA 95670

Calif. Dept. of Fish & Game
Habitat Conservation Planning Branch
1416 9th Street, Suite 1341
Sacramento, CA 95814

Office of Historic Preservation
P.O. Box 942896
Sacramento, CA 94296-0001

Dept. of Parks and Recreation
Resource Management Division
P.O. Box 942896
Sacramento, CA 94296-0001

DWR- Reclamation Board
1416 Ninth Street, Room 1601
Sacramento, CA 95814

Calif. Dept. of Water Resources
Environmental Services Office
3251 S. Street, Room 111
Sacramento, CA 95816-7017

California Highway Patrol
Office of Special Projects
2555 1st Avenue
Sacramento, CA 95818

Calif. Dept. of Housing and Community Development
Housing Policy Division
P.O. Box 952053
Sacramento, CA 94252-2053

Calif. Dept. of General Services
Environmental Services Section
1325 J Street, Suite 1910
Sacramento, CA 95814-2928

Calif. Air Resources Board
Transportation Projects
P.O. Box 2815
Sacramento, CA 95812

Integrated Water Resources Control Board
Division of Water Quality
P.O. Box 100
Sacramento, CA 95812

Department of Toxic Substance Control
1000 I Street
Sacramento, CA 95812-2828

California Energy Commission
1516 Ninth Street, MS-29
Sacramento, CA 95814-5504

Native American Heritage Commission
915 Capitol Mall, Room 364
Sacramento, CA 95814

Public Utilities Commission
505 Van Ness Avenue
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California State Lands Commission
100 Howe Avenue, Suite 100 South
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Honorable Dianne Feinstein
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Congressman Dennis Cardoza
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Mayor Per Tempore Ellie Wooten
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369 W. 18th Street
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Merced County Planning Department
Mr. Bill Nicholson, Director
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Parks and Community Services
Alexander Hall, Director
678 West 18th Street
Merced, CA 95340

Merced County
Department of Public Works
Road Division
Steve E. Rough
345 W. 7th Street
Merced, CA 95340

Appendix A California Environmental Quality Act Checklist

The following checklist identifies physical, biological, social, and economic factors that might be affected by the proposed project. The impact levels include "potentially significant impact," "less than significant impact with mitigation," "less than significant impact," and "no impact."

Environmental Impact Reports must identify significant or potentially significant impacts. In many cases, background studies performed in connection with the project indicate no impacts. An "X" in the "no impact" column of the checklist reflects this determination. Please refer to Chapter 2 for detailed discussions regarding impacts.

	Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
AESTHETICS - Would the project:				
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☐	X
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic building within a state scenic highway?	☐	☐	☐	X
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☐	☐	X
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☐	X
AGRICULTURE RESOURCES - In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	X
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	X
c) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?	☐	☐	☐	X
AIR QUALITY - Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☐	X

	Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?				X
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?			X	
d) Expose sensitive receptors to substantial pollutant concentration?				X
e) Create objectionable odors affecting a substantial number of people?				X
BIOLOGICAL RESOURCES - Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?		X		
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?				X
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?				X
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?				X
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?				X
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?				X

	Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
COMMUNITY RESOURCES - Would the project:				
a) Cause disruption of orderly planned development?				X
b) Be inconsistent with a Coastal Zone Management Plan?				X
c) Affect life-styles, or neighborhood character or stability?				X
d) Physically divide an established community?				X
e) Affect minority, low-income, elderly, disabled, transit-dependent, or other specific interest group?		X		
f) Affect employment industry, or commerce, or require the displacement of businesses or farms?		X		
g) Affect property values or the local tax base?			X	
h) Affect any community facilities (including medical, educational, scientific, or religious institutions, ceremonial sites or sacred shrines?				X
i) Result in alterations to waterborne, rail, or air traffic				X
j) Support large commercial or residential development?				X
k) Affect wild or scenic rivers or natural landmarks?				X
l) Result in substantial impacts associated with construction activities (e.g., noise dust, temporary drainage, traffic detours, and temporary access, etc.)?		X		
CULTURAL RESOURCES - Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	X			

	Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☐	☐	☐	X
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☐	X
d) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	☐	X
GEOLOGY AND SOILS - Would the project:				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:	☐	☐	☐	X
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☐	X
ii) Strong seismic ground shaking?	☐	☐	☐	X
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☐	X
iv) Landslides?	☐	☐	☐	X
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	X	☐
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☐	☐	X
d) Be located on expansive soil as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property.	☐	☐	☐	X

	Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?				X
HAZARDS AND HAZARDOUS MATERIALS - Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?			X	
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?				X
c) Emit hazardous emissions or handle hazardous or acutely hazardous material, substances, or waste within one-quarter mile of an existing or proposed school?			X	
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?				X
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?				X
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?				X
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				X
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?				X
HYDROLOGY AND WATER QUALITY - Would the project:				
a) Violate any water quality standards or waste discharge requirements?				X

	Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	☐	☐	☐	X
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	☐	☐	X	☐
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	☐	☐	☐	X
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	☐	X	☐	☐
f) Otherwise substantially degrade water quality?	☐	☐	☐	X
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	☐	☐	☐	X
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	☐	☐	☐	X
i) Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam?	☐	☐	☐	X
j) Inundation by seiche, tsunami, or mudflow?	☐	☐	☐	X
LAND USE AND PLANNING - Would the project:				
a) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	X

	Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
b) Conflict with any applicable habitat conservation plan or natural community conservation plan?				X
MINERAL RESOURCES - Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?				X
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?				X
NOISE - Would the project:				
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?			X	
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?			X	
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?		X		
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?			X	
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?				X
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?				X

	Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
POPULATION AND HOUSING - Would the project:				
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?				X
b) Displace substantial numbers of existing housing necessitating the construction of replacement housing elsewhere?				X
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?				X
PUBLIC SERVICES -				
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
Fire protection?				X
Police protection?				X
Schools?				X
Parks?		X		
Other public facilities?				X
RECREATION -				
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?				X
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?				X

	Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
TRANSPORTATION/TRAFFIC - Would the project:				
a) Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?				X
b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?				X
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?				X
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incomplete uses (e.g., farm equipment)?				X
e) Result in inadequate emergency access?				X
f) Result in inadequate parking capacity?				X
g) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?				X
UTILITY AND SERVICE SYSTEMS - Would the project:				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?				X
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?				X
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?			X	

	Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?				X
e) Result in determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?				X
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?				X
g) Comply with federal, state, and local statutes and regulations related to solid waste?				X
MANDATORY FINDINGS OF SIGNIFICANCE -				
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, or cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	X			
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?				X
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?			X	

Appendix B Section 4(f) Evaluation

Joe Herb Park (top photo)

and

Bradley Overhead Bridge (bottom photo)

B.1 Introduction

Section 4(f) of the Department of Transportation Act of 1966, codified in federal law at 49 United States Code 303, declares that "it is the policy of the United States Government that special effort should be made to preserve the natural beauty of the countryside and public park and recreation lands, wildlife and waterfowl refuges, and historic sites."

Section 4(f) specifies that the Secretary [of Transportation] may approve a transportation program or project . . . requiring the use of publicly owned land of a public park, recreation area, or wildlife and waterfowl refuge of national, state, or local significance, or land of an historic site of national, state, or local significance (as determined by the federal, state, or local officials having jurisdiction over the park, area, refuge, or site) only if:

1. there is no prudent and feasible alternative to using that land; and
2. the program or project includes all possible planning to minimize harm to the park, recreation area, wildlife and waterfowl refuge, or historic site resulting from the use.

Section 4(f) further requires consultation with the Department of the Interior and, as appropriate, the involved offices of the Departments of Agriculture and Housing and Urban Development in developing transportation projects and programs that use lands protected by Section 4(f). If historic sites are involved, then coordination with the State Historic Preservation Officer is also required.

B.2 Description of Proposed Project

State Route 140 runs east and west, connecting Interstate 5 to Yosemite National Park (see Figure B1). The highway enters Merced from the west at the intersection of 13th and V Street, crosses State Route 99, and then heads eastward along the Yosemite Parkway corridor. The highway serves local traffic as well as a high volume of traffic traveling to Yosemite National Park and other recreational areas in the Sierra. State Route 140 also serves the city of Gustine and the communities of Planada, Cathey's Valley, Mariposa, Midpines, Briceburg, and El Portal.

In the project area, State Route 140 is a two-lane highway with a continuous left-turn lane from Marthella Avenue to the beginning of the Bradley Overhead Bridge. A two-lane road with no shoulders goes over the bridge. The urban section west of the Bradley Overhead Bridge has numerous driveways and local street accesses. Intersections with State Route 140 are at Marthella Avenue, Carol Avenue, East 21st Street, Parsons Avenue, Anderegg Avenue, Edwards Avenue, Kelly Avenue, Baker Drive, and Santa Fe Avenue. Except for Parsons Avenue, which has traffic signals, all intersections of State Route 140 with local roads are controlled by stop signs, including the Joe Herb Park entrance and exit.

This project, funded in part by the U.S. Department of Transportation, proposes to improve State Route 140 in the City of Merced and Merced County by widening 1.8 kilometers (1.1 miles) of the two-lane highway from Marthella Avenue to 0.26 kilometer (0.16 mile) east of Santa Fe Avenue. The project would demolish and replace the existing non-standard Bradley Overhead Bridge with a new bridge consisting of two lanes in each direction and a continuous two-way left-turn lane. The project would also add signals at the State Route 140/Kelly Avenue and State Route 140/Santa Fe Avenue intersections.

The purpose of the proposed project is to correct non-standard design features and alleviate local street traffic congestion by reducing vehicle delay at various intersections, and accommodate future traffic demand in the project limits. The existing bridge does not have any shoulders, lacks adequate stopping sight distance and has non-standard vertical and horizontal clearances between the bridge columns. In addition, Baker Drive is less than 5 meters (16 feet) wide under the existing bridge because of the space between the bridge columns narrowing down to one lane under the structure. These non-standard features increase emergency response times and cause the bridge to be closed down even for minor incidents. These deficiencies would be corrected by replacing the existing bridge with a wider structure, widening the road in the project limits to five lanes and realigning local streets.

As a consequence of constructing a new bridge, the existing access to the Sierra Portal Mobile Home Park on the south side of State Route 140 would be permanently closed. To comply with current design standards for sight distance, heading eastbound the new structure would begin its incline approximately 80 meters (262 feet) earlier on State Route 140 thereby blocking off the current access. To compensate, Caltrans proposes to create access to the mobile home park via the northern end of Joe Herb Park. The existing entrance to Joe Herb Park, off of State

Route 140, would be used in the construction of a new frontage road linking up with the northwest part of the mobile home park, nearest the manager's office and clubhouse of the mobile home park.

For a more detailed project description, please see Chapter 1 *Project Description* and *Project Alternatives* of the Draft Environmental Impact Report/Environmental Assessment.

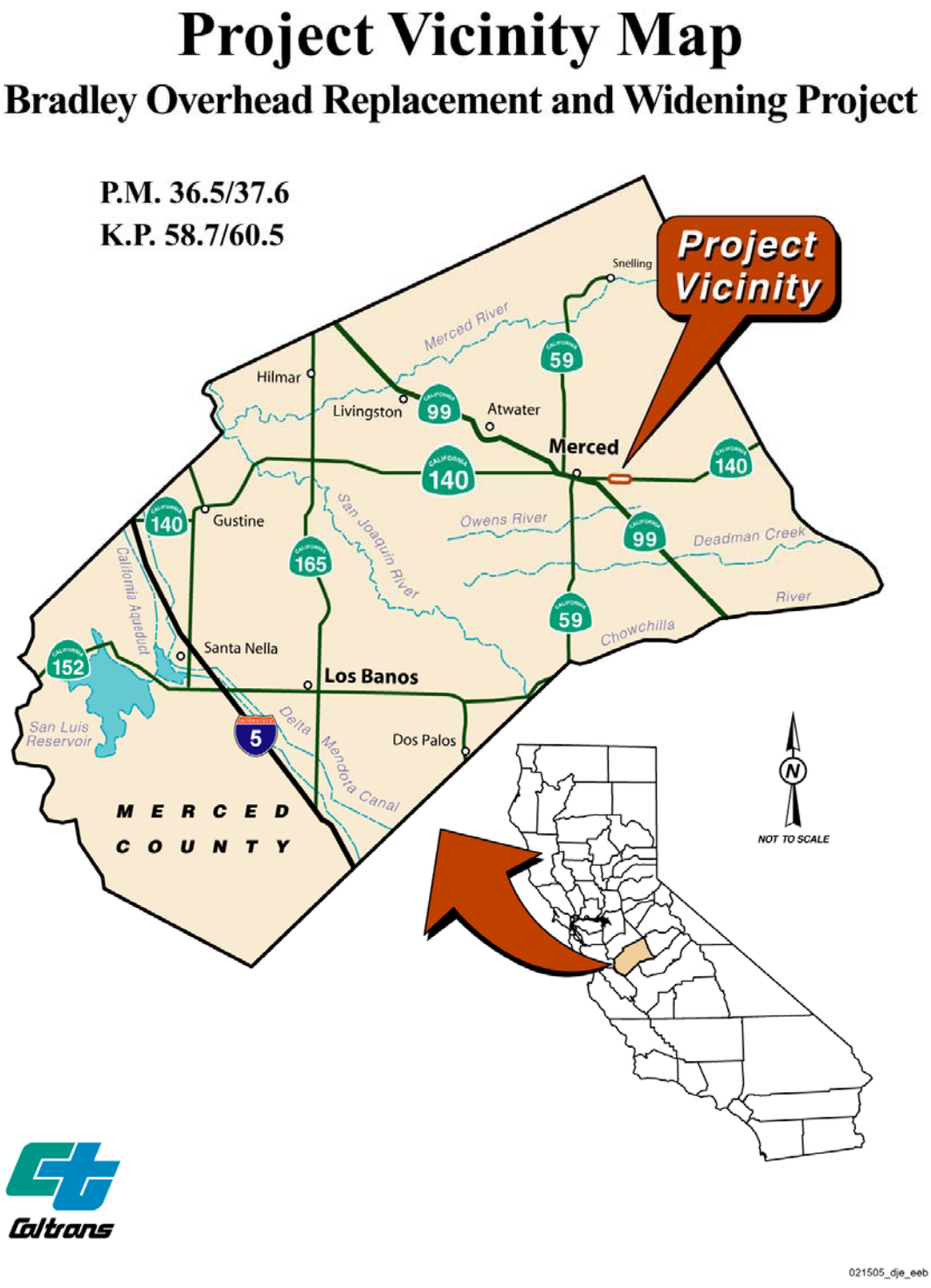


Figure B1 Project Vicinity Map

Alternatives

There are three project alternatives: two build alternatives and one no-build alternative. Both build alternatives would demolish the existing Bradley Overhead Bridge, which is a historic bridge and a Section 4(f) resource. Both build alternatives would also affect the Joe Herb Park, a public park that is also a Section 4(f) resource. For each of the two build alternatives, various design options were developed dealing with access to the Sierra Portal Mobile Home Park through the Section 4(f) resource, Joe Herb Park, as discussed in the following subsections.

Alternative 1 – Four-lane Widening and Bridge Replacement

Alternative 1 proposes to widen the existing two-lane road to a four-lane highway with a continuous two-way left-turn lane from Marthella Avenue to east of Santa Fe Avenue. The old Bradley Overhead Bridge would be replaced with a new bridge consisting of four lanes and a continuous two-way left-turn lane. Because the new structure would begin its incline approximately 80 meters (262 feet) earlier than what now exists, it would block off the current access from the Sierra Portal Mobile Home Park onto State Route 140. To compensate, Caltrans proposes to create access to the mobile home park via the northern end of Joe Herb Park. The existing highway would be widened to the north to accommodate the additional lanes. Alternative 1 would satisfy the purpose and need of the project by accommodating future traffic demands and constructing a standard transportation facility. The current (2004) estimated cost for Alternative 1 is $35,413,000, which breaks down to $6,242,000 for right-of-way and $29,171,000 for construction.

Alternative 2 – Two-lane Widening and Bridge Replacement

Alternative 2 proposes to widen the existing two-lane road to a two-lane highway with a continuous left-turn lane from Edwards Avenue to east of Santa Fe Avenue. The Bradley Overhead Bridge would be demolished and a new structure erected consisting of two lanes with a continuous left turn lane in the median. Because the new structure would begin its incline approximately 80 meters (262 feet) earlier than what now exists, it would block off the current access from Sierra Portal Mobile Home Park onto State Route 140. To compensate, Caltrans proposes to create access to the mobile home park via the northern end of Joe Herb Park. The existing highway would be widened to the north to accommodate the additional lanes. Alternative 2 would satisfy the purpose and need of the project, but the projected Level of Service for local streets for the design year 2027 would increase the likelihood for a future widening project, creating future interruptions to traffic and residents and additional

costs. The current (2004) estimated cost for Alternative 2 is $28,514,000, which breaks down to $6,193,000 for right-of-way and $22,321,000 for construction.

Design Options for Joe Herb Park

In addition to the three viable project alternatives, there are various design options (alternatives) for Joe Herb Park. Design Option 1D is the most viable alternative. The additional withdrawn design options are discussed in Appendix B under B.5.2 Avoidance Alternatives. Because the new Bradley Overhead Bridge would block off the current access from Sierra Portal Mobile Home Park onto State Route 140 (see Figure B3 for the existing layout of Joe Herb Park), Caltrans proposes to create access to the mobile home park via the northern end of Joe Herb Park.

Design Option 1D – New City Street

Design Option 1D proposes to realign access to the Sierra Portal Mobile Home Park through Joe Herb Park, connecting the existing entrance to the mobile home park (see Figure B5). No relocation of any mobile home unit, other structure or utility within the mobile home park would be required. Baker Drive would be realigned along with Santa Fe Avenue. Traffic signals would be placed at the intersections of State Route 140/Kelly Avenue and State Route 140/Santa Fe Avenue.

A new access road would be constructed linking Kelly Avenue and the Sierra Portal Mobile Home Park entrance. A cul-de-sac would be constructed in the northeast corner of the park adjacent to the existing covered picnic area to facilitate turns and provide a loading/unloading area. All parking spaces removed would be replaced in kind (66 spaces in all), including several spaces that comply with the Americans with Disabilities Act. In addition, several new pathways would improve pedestrian movement in the park. An Americans with Disabilities Act pathway linking the bus stop on State Route 140 to the park's proposed new road would also be included in the design features. No impact to any existing park equipment or structures is anticipated. The playground equipment, bathroom facilities, covered picnic area and ball fields would all remain intact.

Design Option 1E – Park Road Extension

Design Option 1E proposes to realign access to the Sierra Portal Mobile Home Park farther south through Joe Herb Park to the northwest corner of the mobile home park (see Figure B6). Traffic signals would be placed at the intersections of State Route 140/Kelly Avenue and State Route 140/Santa Fe Avenue.

This option would not be viable due to the following reasons:

- Increased project costs due to the relocation of several mobile home units, including the manager's unit, and utilities within the mobile home park.

- Closing of the existing accesses to and from State Route 140 would re-route mobile home park traffic through Joe Herb Park to Kelly Avenue through the middle of the Joe Herb Park. According to the Caltrans August 2002 Traffic Study for the proposed project, approximately 1,370 daily trips (132 vehicles during peak hour) enter and exit the existing mobile home park. The new city street accommodating this traffic would be located between the bathroom and barbecue facilities, segmenting the park and forcing park visitors to cross the public road.

In addition, the project development team, including City and County of Merced officials, Sierra Portal Mobile Home Park management and residents were opposed to this design option because of the above-stated impacts to Joe Herb Park and the mobile home park.

B.3 Description of Section 4(f) Resources

Two individual resources (see Figure B2) subject to Section 4(f) of the Department of Transportation Act are located in the project area that would potentially be affected by the proposed project:

1. Bradley Overhead Bridge, a historic bridge located in the City and County of Merced.

2. Joe Herb Park, a public park, located in the City of Merced.

There would be no direct use to any other Section 4(f) properties in the project vicinity.

B.3.1 Bradley Overhead Bridge

The Bradley Overhead Bridge is located in the City and County of Merced on State Route 140. The bridge crosses the Burlington Northern & Santa Fe Railroad line. The structure is owned and maintained by Caltrans. Built in 1931, the Bradley Overhead Bridge was the first arc-welded, steel-girder bridge in California and served as part of

the All-Year Highway to Yosemite. It is the last arc-welded, steel-girder bridge left in California.

The bridge was built as a result of a state grade-crossing elimination program, which added bridges over railroads throughout California. The crossing of the State Route 140 and the Santa Fe Railroad (where the Bradley Overhead Bridge now stands) was eliminated because of the angled road alignment, which resulted in impaired sight distance. The Bradley Overhead Bridge was consequently built as an overhead road for vehicles crossing the busy Santa Fe Railroad tracks. No sidewalks or bike lanes are provided on the bridge.

The bridge continues as a vital link in the state highway system. Over the years, it has been continuously maintained and repaired, but not altered. The Bradley Overhead Bridge retains a high degree of integrity of location, design, setting, materials, workmanship, feeling and association as discussed in the Historic Architectural Survey Report/Historic Resource Evaluation Report (Caltrans 2001).

The Bradley Overhead Bridge was identified to be eligible for inclusion in the National Register of Historic Places under criteria A and C. The structure has strong associations with the construction and development of the All-Year Highway, one of the main roadways leading into Yosemite National Park. The structure has retained sufficient integrity of design, materials, setting, and workmanship that contribute to its significance as California's first major arc-welded highway bridge. The steel girder design of the lower structure reflects the innovative use of steel materials in structures of this type during the Great Depression.

The Bradley Overhead Bridge is the last major highway bridge structure of its kind in the state. The State Historic Preservation Officer concurred with the finding on December 18, 2001.

B.3.2 Joe Herb Park

Joe Herb Park is a City of Merced-owned and -maintained public park, located along State Route 140, in the southeastern limits of the city. The park is approximately 6.47 hectares (16 acres) in size and bordered by State Route 140 to the north, Sierra Portal Mobile Home Park to the east, Golden Valley High School to the south, and Kelley Avenue to the west.

The park contains picnic areas with barbecues and shelters, playground equipment, bathrooms, parking, three baseball/softball fields, horseshoe pits, and open space for public use. The park is used for organized soccer and baseball/softball leagues.

The existing park can be entered from Kelly Avenue and exited directly to State Route 140 via a one-way street through the northern part of the park. See Figure B3 for a layout of the existing park area.

B.4 Impacts

B.4.1 Impacts to the Bradley Overhead Bridge

Alternative 1 – Four-lane Widening and Bridge Replacement

Alternative 1 requires the demolition of the Bradley Overhead Bridge, resulting in an adverse effect to the Section 4(f) property. The demolition of the existing bridge would be necessary because the existing State Route 140 alignment would stay at its current location and the proposed new bridge would take the place of the existing bridge.

Alternative 2 – Two-lane Widening and Bridge Replacement

Alternative 2 requires the demolition of the Bradley Overhead Bridge, resulting in an adverse effect to the Section 4(f) property. The demolition of the existing bridge would be necessary because the existing State Route 140 alignment would stay at its current location and the proposed new bridge would take the place of the existing bridge.

B.4.2 Impacts to Joe Herb Park – By Design Option

Replacement of the Bradley Overhead Bridge would result in impacts to Joe Herb Park because the new structure would begin its incline approximately 80 meters (262 feet) earlier than the existing structure and would block off the current access from Sierra Portal Mobile Home Park and Joe Herb Park onto State Route 140. The closure of the access and exit was necessary to comply with current design standards for sight distance on the bridge. To compensate, Caltrans proposes to create access to the Sierra Portal Mobile Home Park via the northern end of Joe Herb Park. These changes would result in the redesign of the northern portion of Joe Herb Park (see Figure B3 for the existing design).

Each of the two build alternatives includes various possible design options involving access for the Sierra Portal Mobile Home Park. Two design options (Design Options 1D and 1E) require a more extensive redesign of Joe Herb Park, and two others (Design Options 1A and 1F) would cause some minor impacts by only eliminating the existing access from Joe Herb Park to State Route 140, therefore having an impact to this Section 4(f) resource. The No-Build Alternative would entirely avoid Joe Herb Park.

During the early project development and design process, it was also discussed to create a new access for the mobile home park from the southwest connecting Joe Herb Park and the mobile home park to Parsons Avenue with an extension of Merced Avenue (currently not existing). Two early design options were developed (Design Options 1B and 1C) but dismissed because the new public road would create a physical boundary between Joe Herb Park and Golden Valley High School. Currently, the high school uses Joe Herb Park during physical education classes, and the school children would be forced to cross the new public road, creating a potential safety problem. In addition, moving the existing access of the mobile home park to the southwest corner would disrupt the mobile home park community by relocating the entrance, manager's quarters, community center and several residents. Furthermore, traffic would be re-routed to Parsons Avenue, adding traffic to the residential area on Parsons Avenue and to the high school area. Therefore, these two alternatives were withdrawn and not studied further.

Design Option 1D – New City Street

Design Option 1D would affect approximately 0.8 hectare (1.9 acres) of Joe Herb Park by removing approximately 22 trees and several shrubs, portions of open grass areas, portions of the existing roadway/parking, and segments of the existing irrigation system. The existing road through the northern portion of the park would be removed (see Figure B5).

Closing the existing accesses to and from State Route 140 would re-route mobile home park traffic through Joe Herb Park to Kelly Avenue. According to the Caltrans August 2002 Traffic Study for the proposed project, approximately 1,370 daily trips (132 vehicles during peak hour) enter and exit the existing mobile home park. The new city street accommodating this traffic would be located at the northern end of Joe Herb Park parallel to State Route 140, routing mobile home park and internal Joe Herb Park traffic to Kelly Avenue. Even though the additional traffic from the mobile

home park would add traffic to Joe Herb Park, impacts are negligible since no park facility or pedestrian traffic would be affected and the park would not be segmented.

A cul-de-sac would be constructed in the northeast corner of the park adjacent to the existing covered picnic area to facilitate turns and provide a loading/unloading area. All parking spaces removed would be replaced in kind (66 spaces in all), including several spaces that comply with the Americans with Disabilities Act. In addition, several pedestrian pathways would be constructed to link various sections of the park, creating a better flow through the park and enhancing the facility for park users. An Americans with Disabilities Act pathway linking the bus stop on State Route 140 to the parks' proposed frontage road would also be included in the design features.

No impact to any existing park equipment or structures is anticipated. The playground equipment, bathroom facilities, covered picnic area and ball fields would all remain intact. The difference between paved surfaces currently existing and after construction would be approximately 0.1 hectare (0.25 acre) less pavement.

Design Option 1E – Park Road Extension

Design Option 1E would affect approximately 0.59 hectare (1.45 acres) of the park by removing approximately 14 trees and a few miscellaneous shrubs, portions of open grass areas, portions of the existing roadway/parking, and segments of the existing irrigation system (see Figure B6).

The existing road through the northern portion of the park would be extended east approximately 8.5 meters (28 feet) to reach the property line of the Sierra Portal Mobile Home Park. Several units directly adjacent to the eastern edge of Joe Herb Park, including the manager's unit, would have to be relocated within the mobile home park property to allow for construction of the new entrance into the residential complex and the extension of the park road from Joe Herb Park.

No impact to any existing park equipment or structures is anticipated. The playground equipment, bathroom facilities, covered picnic area and ball fields would all remain intact. The difference between paved surfaces that currently exist and after construction would be approximately 0.06 hectare (0.15 acre) less pavement.

Design Option 1E was not considered viable because:

- Closing the existing accesses to and from State Route 140 would re-route mobile home park traffic through Joe Herb Park to Kelly Avenue through the middle of the Joe Herb Park. According to the Caltrans August 2002

Traffic Study for the proposed project, approximately 1,370 daily trips (132 vehicles during peak hour) enter and exit the existing mobile home park. The new city street accommodating this traffic would be located between the bathroom and barbecue facilities, segmenting the park and forcing park visitors (and pedestrians) to cross the public road.

- Relocation of the entrance, manager's quarters and community center would disrupt the mobile home community.

- Project cost would increase because several mobile home park units, including the manager's unit, and utilities within the mobile home park would have to be relocated.

In addition, the project development team, including City and County of Merced officials, Sierra Portal Mobile Home Park management and residents were opposed to this design option because of the above-stated impacts to Joe Herb Park and the mobile home park.

B.5 Avoidance Alternatives

Design options that avoid use or impact to Joe Herb Park were considered in the development of the proposed project. Objectives used to determine if a design option was viable included whether the design option: was accepted by the local community and neighborhood, was prudent from a cost perspective, affected emergency services in the immediate area, was compatible with local and regional planning, and/or preserved the use of the park for the surrounding community. However, due to the new design of the Bradley Overhead Bridge, each build alternative and design option would block off the exit to State Route 140 from Joe Herb Park and the access to Sierra Portal Mobile Home Park from State Route 140, and therefore would have an impact on Joe Herb Park.

No-Build Alternative

The No-Build Alternative would leave State Route 140 in its current condition. No construction would occur. The Section 4(f) resource, the Bradley Overhead Bridge, would not be demolished; it would remain unchanged. The other Section 4(f) resource, Joe Herb Park, would also not be affected (see Figure B2 for the location of the Section 4(f) properties.).

However, this alternative would not address the purpose and need of the project. It would not accommodate the projected level of transportation demand and would not correct operational and design deficiencies. Local traffic circulation would not be improved.

Four-Lane Northern Alignment

The Four-Lane Northern Alignment alternative proposes a four-lane highway adjacent to and north of the existing alignment. A new five-lane bridge would be built approximately 15 meters (49 feet) north of the existing bridge. This alternative would require right-of-way between Parsons Avenue and Kelly Avenue for the transition to the existing roadway. This alternative would take at least 11 acres of new right-of-way. The right-of-way acquisitions would significantly affect a church property, two apartment complexes, five single family residents and seven commercial properties. The church property would lose part of its parking lot. This alternative would also require the relocation of at least 25 apartment units within the two apartment complexes. This would mean approximately 98 people would need to be relocated. The relocation of buildings and people would result in a large impact to the surrounding community. This alternative would not impact the Sierra Portal Mobile Home Community. There would also be a large increase in construction and right-of-way cost, creating a 45% increase in the cost of the project. Therefore, this alternative was not considered a prudent avoidance alternative.

Railroad Underpass

The Railroad Underpass alternative would alter the vertical alignment of the Burlington Northern & Santa Fe Railroad line so it goes under the current State Route 140 alignment but maintains its existing horizontal location. The existing bridge structure would then be used as a pedestrian overpass. This alternative was considered impractical because the project site is in an existing floodplain with a high water table. This alternative could not be engineered or constructed without considerable cost increases due to the height of the water table. This alternative would cost approximately $100,000,000. Therefore, this alternative was considered not prudent and feasible.

State Route 140 Underpass

The State Route 140 Underpass alternative proposes to realign State Route 140 under the Burlington Northern & Santa Fe Railroad line to avoid any impacts to the existing Bradley Overhead Bridge. This alternative was considered impractical because the

project site is in an existing floodplain with a high water table. This alternative could not be engineered or constructed without considerable cost increases due to the height of the water table. This alternative would cost approximately $100,000,000. Therefore, this alternative was considered not prudent and feasible.

B.6 Measures to Minimize Harm

Southern Alternative

While, this alternative would avoid the bridge it would not avoid impacts to the Joe Herb Park, and thus is considered not as an avoidance alternative but a minimization alternative. The Southern Alternative proposes to realign State Route 140 to the south of the existing alignment. The alignment would run through the northeastern end of Joe Herb Park and the Sierra Portal Mobile Home Park and residential parcels located south of Baker Drive. The new road would then tie back into the existing State Route 140 east of Santa Fe Avenue. This alternative would remove at least 15 residential units from the Sierra Portal Mobile Home Park, including the manger's office, the recreation/community building and swimming pool. It would separate approximately 10 residential units from the remaining units on the south side of the re-aligned State Route 140. These units could not function separated from the rest of the community. To relocate the Manger's office, recreation/community center and swimming pool within the remaining mobile home park would require the removal of at least six more residential units. Thus potentially impacting a total of 31 residential units, affected at least 62 residents. This would significantly impact the cohesion of the senior-only community. Many residents of this community have long term relationships within the community, are on fixed incomes and have mobility issues. Displacement would cause extraordinary harm to the residents of the mobile home park because no equivalent housing is available locally. The estimated cost for this alternative is $45,170,000. Due to these impacts it was not considered a practicable alternative.

Caltrans afforded interested parties, including the City of Merced and the County of Merced, the opportunity to take ownership of the bridge and have it moved to a new location prior to demolition. However, the bridge is a poor candidate for an extensive marketing plan, as a purchaser would incur an estimated cost of $8 million to move and reassemble the bridge. As a result, no interested parties have come forward with such a plan.

Due to the loss of qualities that make the Bradley Overhead Bridge significant to the National Register of Historic Places, Caltrans is required to minimize the adverse effects. The Findings of Effects and Memorandum of Agreement detailing the planned mitigation strategy was signed by the Federal Highway Administration, State Historic Preservation Officer and Caltrans on June 13, 2005(see Appendix H). The plan calls for a Historic American Buildings Survey/Historic American Engineering Record to be sent to the National Park Service to determine what type and level of documentation is appropriate for the Bradley Overhead Bridge. Caltrans would ensure that all documentation, including photographs, construction drawings, and written descriptions, be completed and accepted by the Historic American Buildings Survey/Historic American Engineering Record before the start of project construction and that copies of documentation be made available to the State Historic Preservation Officer and appropriate local archives designated by the State Historic Preservation Officer. This work would be accomplished by or under the supervision of a person or persons meeting appropriate professional qualifications set forth in the Secretary of the Interior's Professional Qualifications Standards (48 FR 44738-9). This mitigation plan is incorporated into the Memorandum of Agreement to lessen the effects of the proposed project on the National Register-eligible site.

The new road routing traffic generated by Joe Herb Park and the Sierra Portal Mobile Home Park through the public park to Kelly Avenue would be located at the northern end of the park, close to State Route 140. The new city road would be placed so pedestrians would not have to cross traffic to access any park facilities and no new noise source would be generated since the new lanes would be located next to State Route 140.

The following avoidance and/or mitigation measures are recommended to avoid or offset any impacts to the Section 4(f) resource:

1. Avoid any structures or equipment existing in the park.

2. Construct Americans with Disabilities Act-compliant pedestrian pathways connecting facilities and parking.

3. Replace all removed parking stalls in kind along Kelly Road and the proposed frontage road, including creation of four new Americans with Disabilities Act-compliant stalls.

4. Replant all areas previously containing paved surfaces with grass and intermittent trees and shrubs.

5. All trees and/or shrubs requiring removal for construction activities would be replaced in kind with species approved by the City of Merced and Caltrans, and in keeping with the surrounding ambience of the park.

Widen/Upgrade Existing Bridge

The Widen/Upgrade Existing Bridge alternative proposes widening the existing Bradley Overhead Bridge from two lanes to four lanes. The alternative was not considered viable because the bridge deficiencies, such as the sight distance and bridge profile grade, would not be corrected and the cost to widen the existing two-lane structure would be 40 percent higher than the cost to replace it. In addition, modifications to the existing bridge would diminish or alter the historic integrity and value of the structure. Therefore, this alternative was not considered a viable avoidance alternative.

Design Option 1A – Eastern Access to Baker Drive

Design Option 1A would provide access to the northeast corner of the Sierra Portal Mobile Home Park via a new access road from Baker Drive (see Figure B4). Traffic signals would be placed at the intersections of State Route 140/Kelly Avenue and State Route 140/Santa Fe Avenue.

This design option was not considered a viable avoidance alternative for the following reasons:

- Emergency service vehicles, such as fire, police and ambulance, would not be provided with efficient access to the Sierra Portal Mobile Home Park, a predominantly senior citizen residential complex with more than 100 units. This design option would increase the average distance to the entrance for emergency service vehicles by approximately 540 meters (1/3 of a mile). This would increase the average response time from fire/rescue services by approximately 12% from the nearest fire station, and by approximately 19% for police services from the nearest substation compared to Design Option 1D. The new route for emergency services vehicles would involve navigating through additional intersections, adding to response times and the number of turns.

- Out-of-direction travel (north on Kelly Avenue, then east on Baker Drive and west on the eastern access road into the mobile home park) would add to response time and create potential confusion for emergency services and visitors of the mobile home park.

- Sierra Portal Mobile Home Park management and residents were opposed to this design option alternative and resulting impacts. Sierra Portal management and residents stressed the desire to keep the new access near the existing access due to its proximity to the clubhouse and manager's unit. With the entrance moved to the northeastern part of the mobile home park, the clubhouse and the manager's unit would be considerably farther from the new entrance. The residents cited these impacts as safety issues and not as aesthetically pleasing.

- The costs (approximately $1.9 million according to mobile home park management) to move the manager's unit, the clubhouse, several mobile home park units and utilities would add significantly to the overall project cost.

- Increased project costs (approximately $246,000 (year 2004) excluding mitigation and utility relocation) as a result of additional right-of-way needs associated with the eastern access.

In addition, the project development team, including City and County of Merced officials, were opposed to this design option because of the above-stated impacts to the senior citizen mobile home park.

Design Option 1F – Northern Access to Baker Drive

Design Option 1F would provide access to the northeast corner of the Sierra Portal Mobile Home Park via a new access road from Baker Drive passing under State Route 140 at the new bridge location (see Figure B7). This design option would not re-route traffic from the mobile home park through Joe Herb Park, but the exit from Joe Herb Park to State Route 140 would still be blocked off because of the new Bradley Overhead Bridge.

This design option was not considered a viable avoidance alternative for the following reasons:

- Emergency service vehicles, such as fire, police and ambulance, would not be provided with efficient access to the Sierra Portal Mobile Home Park, a predominantly senior citizen residential complex with more than 100 units. This design option would increase the average distance to the entrance for emergency service vehicles by approximately 540 meters (1/3 of a mile). This would increase the average response time from fire/rescue services by approximately 12% from the nearest fire station, and by approximately 19% for police services from the nearest substation compared to Design Option 1D. The new route for emergency services vehicles would involve navigating through additional intersections, adding to response times and the number of turns.

- Out-of-direction travel (north on Kelly Avenue, then east on Baker Drive and south on the access road into the mobile home park) would add to response time and create potential confusion for emergency services and visitors of the mobile home park.

- Sierra Portal Mobile Home Park management and residents were opposed to this design option and resulting impacts. The desire to keep the new access near to the existing access due to its proximity to the clubhouse and manager's unit was emphasized during meetings. With the entrance moved to the northeastern part of the mobile home park, the clubhouse and the manager's unit would be considerably farther from the new entrance. The residents cited these as safety issues and not as aesthetically pleasing.

- The costs (approximately $1.9 million according to mobile home park management) to move the manager's unit, the clubhouse, several mobile home park units and utilities would add significantly to the overall project cost.

- Increased project costs as a result of additional right-of-way needs associated with the northern access.

In addition, the project development team, including City and County of Merced officials, were opposed to this design option because of the above-stated impacts to Joe Herb Park and the senior citizen mobile home park.

B.7 Coordination

Open House (May 8, 2001)

Caltrans held a Public Information Meeting/Open House at the Merced Civic Center on May 8, 2001, displaying mapping, cross sections and information boards containing scheduling, projected costs and environmental issues. The public input was considered in the process of eliminating some of the proposed project alternatives and design option related to the Bradley Overhead Bridge and Joe Herb Park. Caltrans staff was available to answer questions and address concerns of the approximately 100 city and county officials, local property owners and interested parties. At the meeting, 95 comment cards were received, focusing on the following issues:

- noise
- drainage issues
- evaluation of property values
- curbs and gutters

The majority of people who attended the Open House were in favor of the two build alternatives because the other (withdrawn) alternatives would affect too many people, would not solve current problems, and would remove too many homes.

Of the input received from interested individuals during the public comment period, 120 supported the project, with 44 favoring Alternative 1, six favoring Alternative 2, and one person favoring the Southern Alternative, which was considered but withdrawn. No comments were received specific to Joe Herb Park design; however, one person was in favor of placing a signal for traffic exiting the park/mobile home park onto State Route 140 to increase safety for vehicles entering State Route 140.

The existing Bradley Overhead Bridge is not viewed favorably by the local community. Instead of being seen as part of the historic fabric of the community, the Bradley Overhead Bridge is viewed as an unsafe eyesore and a reminder of the many accidents that have occurred on this section of road. A total of 34 written comments were received specifically requesting that the old bridge be torn down. Eight people mentioned that they personally did not consider the bridge historic. No comments were received in regards to the demolition of the Bradley Overhead Bridge being viewed negatively.

Public Hearing Held on January 28, 2004

A Draft Environmental Impact Report was completed for this project in January 2004. During this process, Caltrans held a public hearing for the Bradley Overhead

Replacement Project at the Merced Civic Center on Wednesday, January 28, 2004 from 4:00 p.m. to 7:00 p.m. Approximately 65 residents and interested parties attended the public hearing. Caltrans distributed to each attendee an information sheet, with a project map illustrating the project location, description, project cost and purpose, background information, funding sources, and a project timeline. Attendees were encouraged to ask questions of the project team and express concerns verbally to a court reporter or through written comment cards.

Caltrans received eight comments via comment cards, one formal letter from an interested party and six comments recorded by the court reporter. A majority of comments were in support of the project and expressed gratitude for the opportunity to provide input on the process. No comments were received objecting to the demolition of the Bradley Overhead Bridge. One person was specifically in favor of routing mobile home park traffic through the park because the proposed traffic signal at Kelly Avenue would increase safety.

Subsequent Community Meeting Held on February 18, 2004

On February 18, 2004, a subsequent community meeting was held at the Sierra Portal Mobile Home Park, located next to Joe Herb Park, to make a presentation to the residents and management. Caltrans staff distributed to each of the approximately 35 attendees the same information used for the formal public hearing.

Caltrans received eight written comments from this meeting. The majority of comments was in support of the project and expressed gratitude for the opportunity to provide input on the process. No comments were received objecting removal of the Bradley Overhead Bridge. In addition, residents of the mobile home park supported a frontage road on the north end of Joe Herb Park (Design Option 1D) [see letter in Appendix B, Section B.7 *Letters and Other Correspondence*].

Opportunity for a Public Hearing

Following the circulation (January 14, 2004 to February 28, 2004) of the Draft Environmental Impact Report, the Federal Highway Administration determined that the preparation of an Environmental Assessment was necessary based on the impacts of the proposed project on the two Section 4(f) properties (Bradley Overhead Bridge and Joe Herb Park), impacts on business and/or residential properties, the required permanent easement to realign the access to the adjacent mobile home park, and effects on San Joaquin Valley kit fox habitat.

Comments received during the previous public comment period and the public hearing (January 28, 2004 and February 18, 2004) have been considered and incorporated into this Draft Environmental Impact Report/Environmental Assessment, as appropriate. An additional opportunity for a public hearing and for public input will be given during the circulation period of this document.

Project Development Team Meetings

Representatives of the Merced County Association of Governments, the County of Merced (Mike Edwards) and the City of Merced participated in Project Development Team meetings held quarterly throughout the project development process. There is substantial support from local government for this project and the proposed demolition of Bradley Overhead Bridge and the changes to Joe Herb Park. A letter dated August 27, 2004 (see Appendix B, Section B.7 *Letters and Other Correspondence*) confirms the agreement by the City of Merced and Sierra Portal Mobile Home Park to the conceptual design for access to the mobile home park through Joe Herb Park.

State Historic Preservation Officer

The State Historic Preservation Officer representative ensured compliance with Section 106 of National Historic Preservation Act. The Memorandum of Agreement with the Federal Highway Administration was signed June 13, 2005 detailing mitigation measures to be taken before demolition of the Bradley Overhead Bridge (see B.5.3 *Measures to Minimize Harm* for more details.).

Merced County Historical Society

Caltrans contacted the Merced County Historical Society in 2000 and 2001 to elicit information on the Bradley Overhead Bridge and for comments on the Historic Property Survey Report. No formal response was received.

Other Local Preservation Efforts

Caltrans afforded interested parties, including the City of Merced and the County of Merced, the opportunity to take ownership of the bridge and have it moved to a new location prior to demolition. The bridge is a poor candidate for an extensive marketing plan, as a purchaser would incur an estimated cost of $8 million to move and reassemble the bridge. As a result, no interested parties have come forward with such a plan.

During the project development period, it became clear that the existing Bradley Overhead Bridge is not viewed favorably by the local community. Instead of being seen as part of the historic fabric of the community, the Bradley Overhead Bridge is viewed as an unsafe eyesore and a reminder of the many accidents that have occurred on this section of road. A total of 34 written comments were received during the May 8, 2002 public meeting specifically requesting that the old bridge be torn down.

B.4.5 Concluding Statement

Based on the above considerations, there is no feasible and prudent alternative to the replacement of the Bradley Overhead Bridge, and the proposed action includes all possible planning to minimize harm to the structure resulting from such use.

Based on the above considerations, there is no feasible and prudent alternative to the use of land from Joe Herb Park, and the proposed action includes all possible planning to minimize harm to Joe Herb Park resulting from such use.

Northern Four-Lane Avoidance Alternative

Figure B.2 Northern Four-Lane Alternative

Southern Alternative

Figure B2: Southern Alternative

SECTION 4(f) PROPERTIES

SR 140 BRADLEY OVERHEAD REPLACEMENT AND WIDENING PROJECT

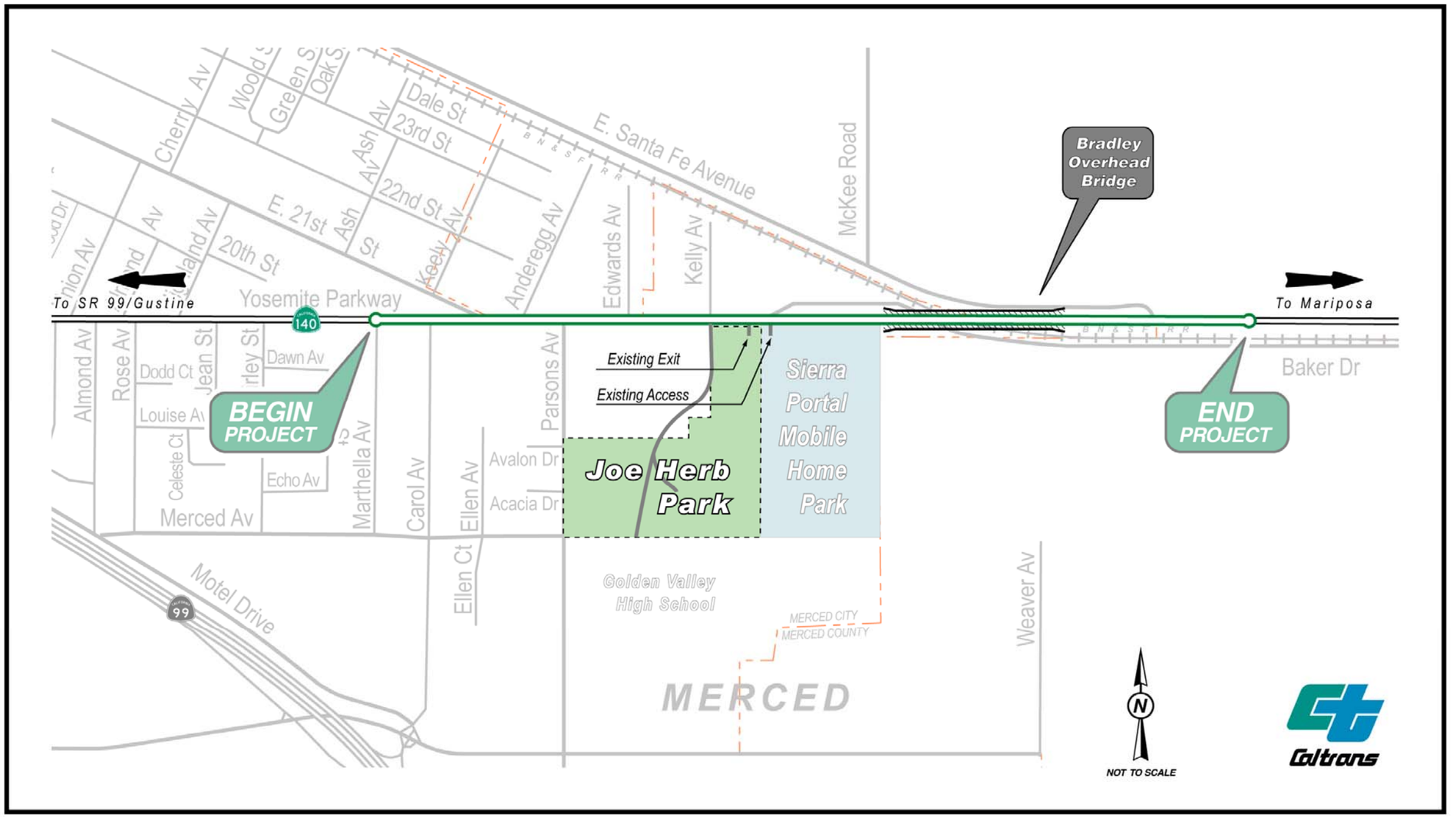


Figure B4 - Section 4(f) Property Locations

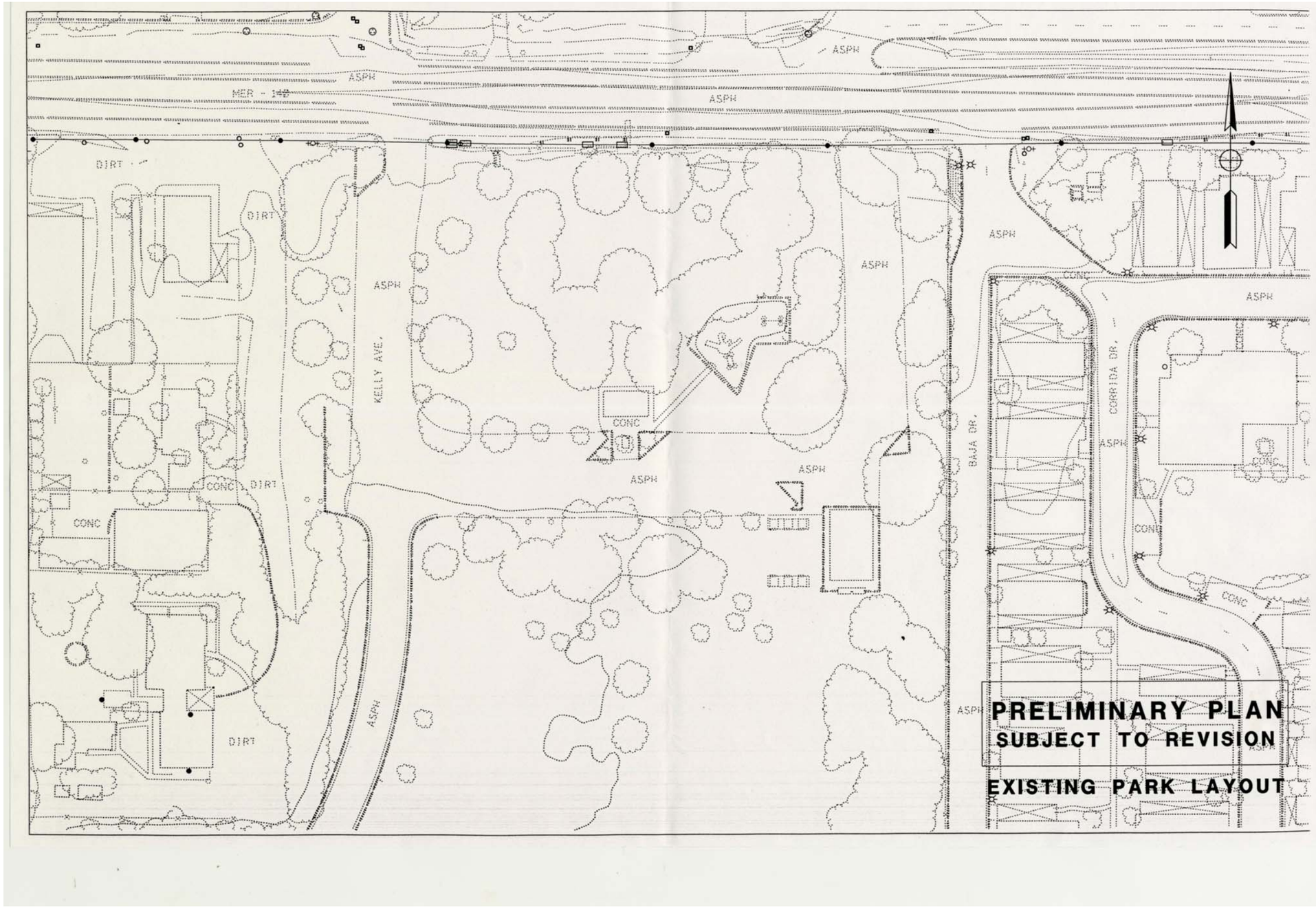


Figure B5 – Existing Park Layout

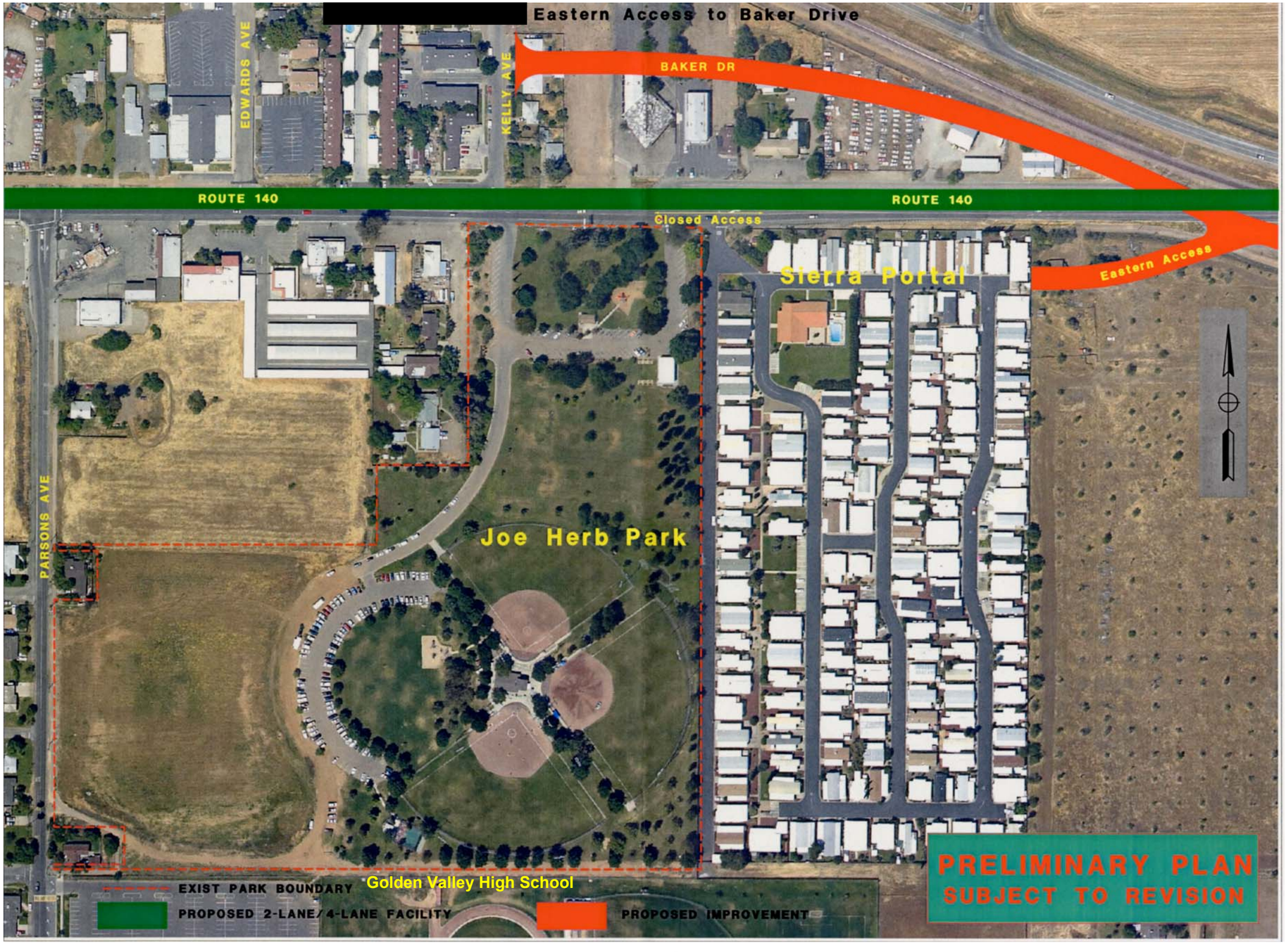


Figure B6 - Design Option 1A

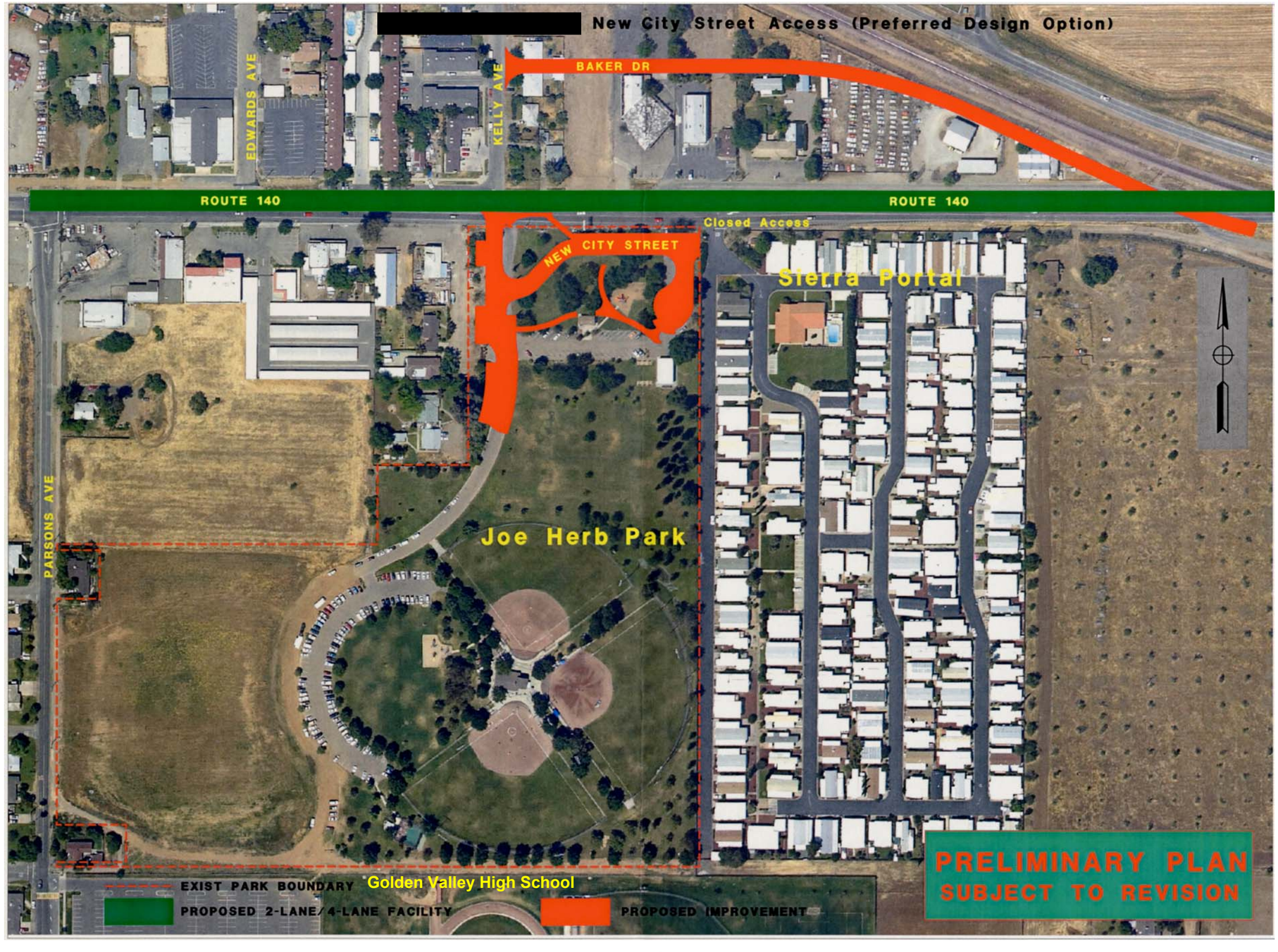


Figure B7 - Design Option 1D

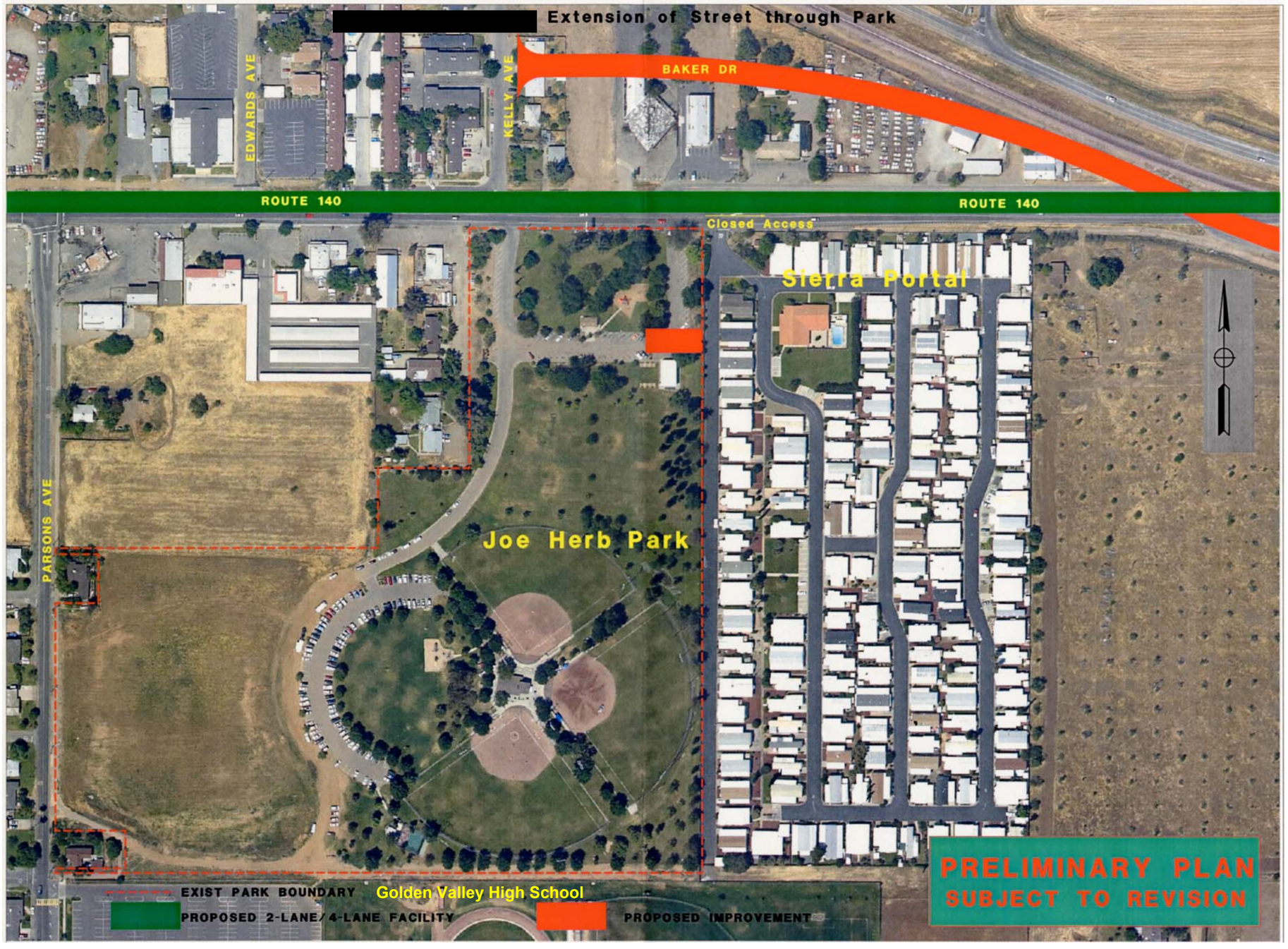


Figure B8 - Design Option 1E

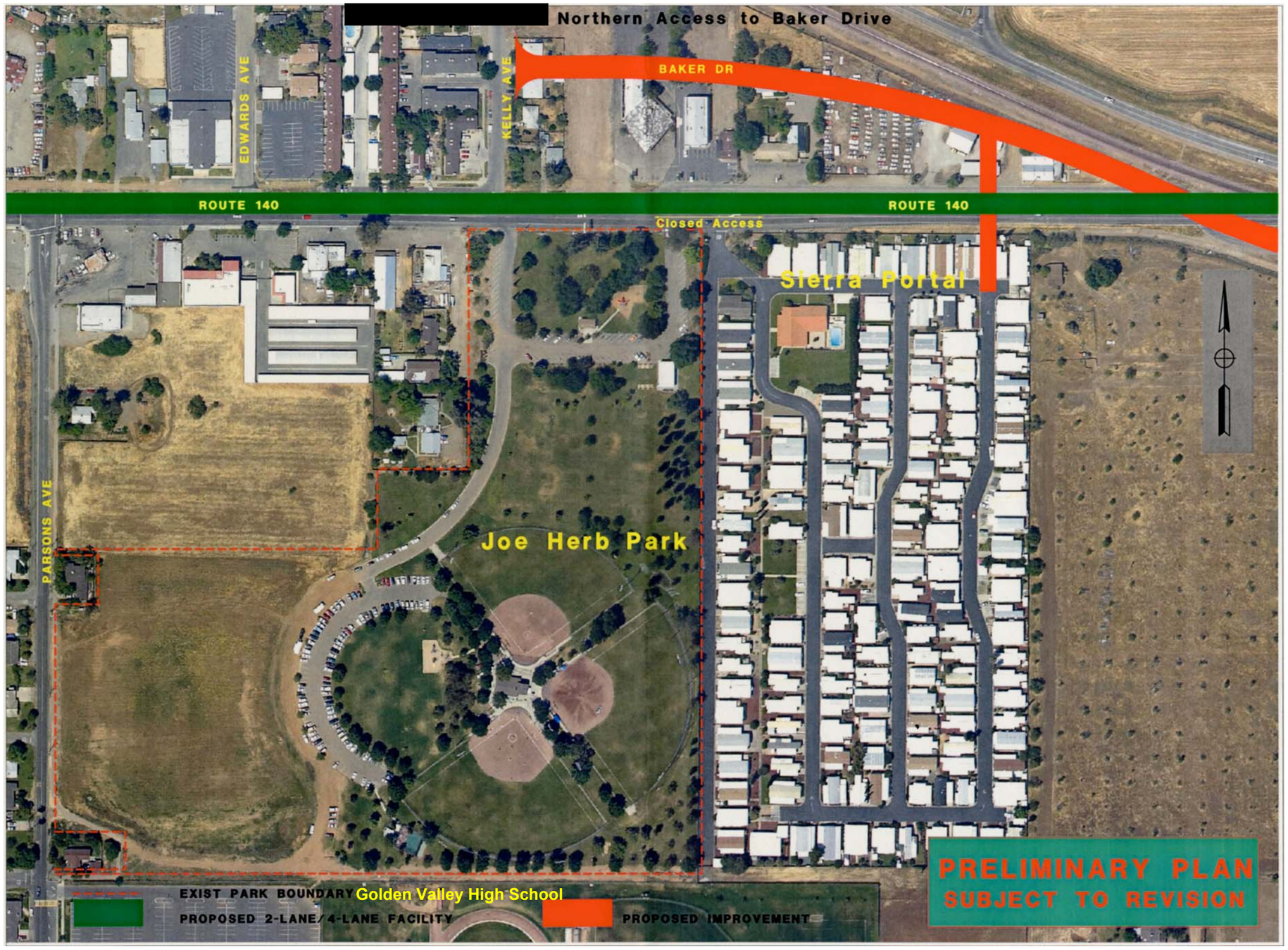
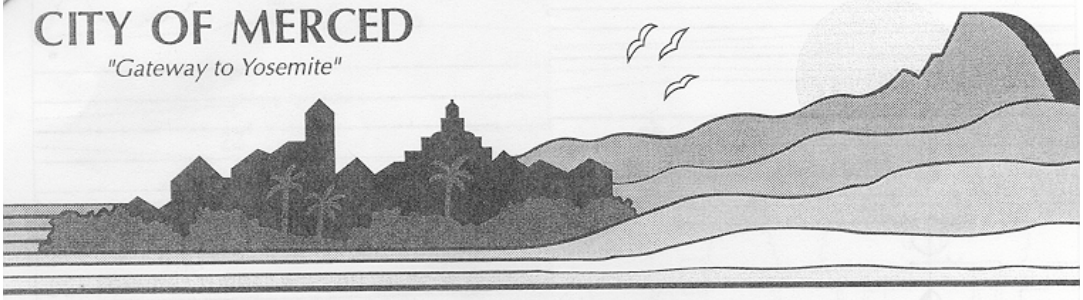


Figure B9 - Design Option 1F

B.7 Letters and Other Correspondence

CITY OF MERCED

"Gateway to Yosemite"



August 27, 2004

District Agreement
10-MER-140 KP 56.3-61.2
EA: 10-3A660 & 10-0G1300
Bradley Overhead Replacement & Widening
Project

Department of Transportation
Mr. Ram Narayan, Project Manager
P.O. Box 2048
Stockton, CA 95201

Dear Ram:

We have reviewed the revised conceptual access for the Sierra Portal Mobile Home Park through Joe Herb Park as requested in an action item of the June 16, 2004 PDT Meeting. The preliminary plan (Attachment #1), provides adequate access into the mobile home park as well as into the City park facilities.

The installation of a traffic control signal at the Kelly Avenue intersection will complete the vehicular traffic needs.

Pedestrian facilities have been addressed by the proposed installation of sidewalk within the playground area to the south and from the mobile home park to the proposed bus stop at the southeast corner of the Kelly Avenue intersection. We agree with the layout, as long as full handicap accessibility is provided at both ends of the sidewalk (i.e. at the bus stop and at the mobile home park).

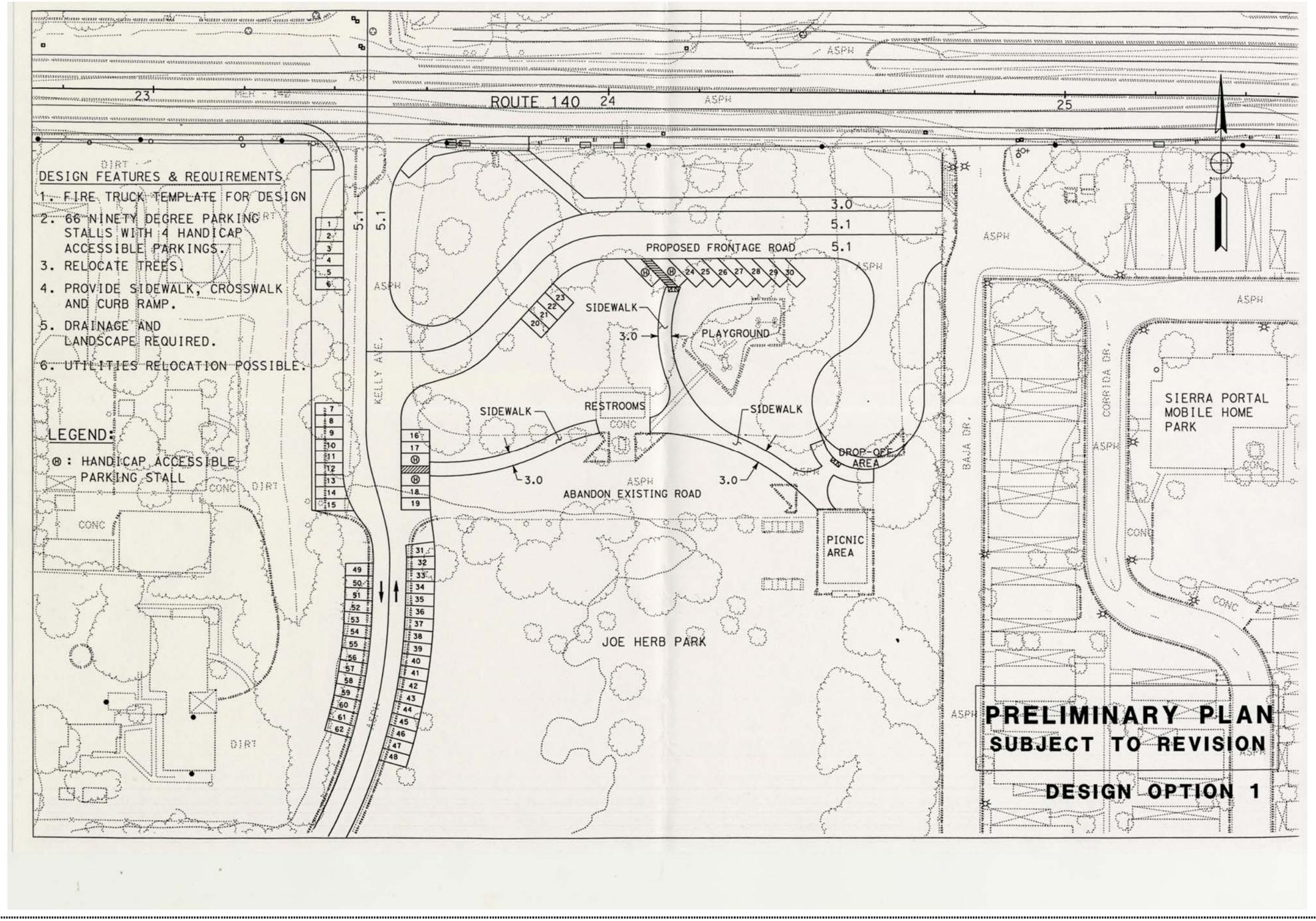
We have provided a copy of the new alignment to Sierra Mobile Home Park and they have given us a written concurrence (Attachment #2) with the plan.

If you have any questions, please call me at (209) 385-6858.

Sincerely,

Jack D. Lesch
Director of Development Services

678 West 18th Street • Merced, California 95340


DESIGN FEATURES & REQUIREMENTS
1. FIRE TRUCK TEMPLATE FOR DESIGN
2. 66 NINETY DEGREE PARKING STALLS WITH 4 HANDICAP ACCESSIBLE PARKINGS.
3. RELOCATE TREES.
4. PROVIDE SIDEWALK, CROSSWALK AND CURB RAMP.
5. DRAINAGE AND LANDSCAPE REQUIRED.
6. UTILITIES RELOCATION POSSIBLE.
LEGEND:
Ⓗ : HANDICAP ACCESSIBLE PARKING STALL
ROUTE 140
PROPOSED FRONTAGE ROAD
SIDEWALK
PLAYGROUND
RESTROOMS
DROP-OFF AREA
ABANDON EXISTING ROAD
PICNIC AREA
JOE HERB PARK
SIERRA PORTAL MOBILE HOME PARK
KELLY AVE.
BAJA DR.
CORTINA DR.
ASPH
CONC
DIRT
PRELIMINARY PLAN
SUBJECT TO REVISION
DESIGN OPTION 1

Sierra Portal

2240 Yosemite Parkway, Merced, CA 95340

July 28, 2004

Mr. Terry Allen
Allen, Polgar, Proietti & Fagalde
P.O. Box 2184
Merced, CA 95344

Dear Mr. Allen:

Thank you for your letter dated July 14, 2004 wherein you had indicated that the City of Merced and Caltrans support the frontage road concept as a replacement entrance for Sierra Portal.

We believe the routing of the frontage road outlined by the City's preliminary drawing best meets the needs all parties concerned and support, in concept, this routing provided that the following are incorporated in the final agreement:

- The frontage road will be a dedicated street.
- Sierra Portal will have unrestricted access rights on the frontage road.
- The frontage road will incorporate an entrance alignment that utilizes much of the existing entrance location.

Provided that the City and Caltrans remain supportive of the frontage road, we remain committed to working out the details to provide a mutually acceptable agreement.

Kindly forward these comments to the City of Merced.

With Regards,

Frank E. Kalcic
Sierra Portal

A Community for Older Persons

ATTACHMENT #2

Appendix C Title VI Policy Statement

STATE OF CALIFORNIA—BUSINESS, TRANSPORTATION AND HOUSING AGENCY ARNOLD SCHWARZENEGGER, Governor

DEPARTMENT OF TRANSPORTATION
OFFICE OF THE DIRECTOR
1120 N STREET
P. O. BOX 942873
SACRAMENTO, CA 94273-0001
PHONE (916) 654-5266
FAX (916) 654-6608
TTY (916) 653-4086

Flex your power!
Be energy efficient!

January 14, 2005

TITLE VI
POLICY STATEMENT

The California Department of Transportation under Title VI of the Civil Rights Act of 1964 and related statutes, ensures that no person in the State of California shall, on the grounds of race, color, national origin, sex, disability, and age, be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity it administers.

WILL KEMPTON
Director

"Caltrans improves mobility across California"

Appendix D Summary of Relocation Benefits

California Department of Transportation Relocation Assistance Program

RELOCATION ASSISTANCE ADVISORY SERVICES

The California Department of Transportation (Caltrans) will provide relocation advisory assistance to any person, business, farm or non-profit organization displaced as a result of Caltrans's acquisition of real property for public use. Caltrans will assist residential displacees in obtaining comparable decent, safe and sanitary replacement housing by providing current and continuing information on sales price and rental rates of available housing. Non-residential displacees will receive information on comparable properties for lease or purchase.

Residential replacement dwellings will be in equal or better neighborhoods, at prices within the financial means of the individuals and families displaced, and reasonably accessible to their places of employment. Before any displacement occurs, displacees will be offered comparable replacement dwellings that are open to all persons regardless of race, color, religion, sex or national origin, and are consistent with the requirements of Title VIII of the Civil Rights Act of 1968. This assistance will also include supplying information concerning federal and state assisted housing programs, and any other known services being offered by public and private agencies in the area.

RESIDENTIAL RELOCATION PAYMENTS PROGRAM

The Relocation Payment program will assist eligible residential occupants by paying certain costs and expenses. These costs are limited to those necessary for, or incidental to, purchasing or renting a replacement dwelling, and actual reasonable expenses incurred in moving to a new location within 80 kilometers (50 miles) of displacee's property. Any actual moving costs in excess of 80 kilometers (50 miles) are the responsibility of the displacee. The Residential Relocation Program can be summarized as follows:

Moving Costs

Any displaced person who was "lawfully" in occupancy of the acquired property regardless of the length of occupancy in the property acquired will be eligible for

reimbursement of moving costs. Displacees will receive either the actual reasonable costs involved in moving themselves and personal property up to a maximum of 80 kilometers (50 miles), a moving service authorization, or a fixed payment based on a fixed moving cost schedule which is determined by the number of furnished or unfurnished rooms of the displacement dwelling.

Purchase Supplement

In addition to moving and related expenses payments, fully eligible homeowners may be entitled to payments for increased costs of purchasing replacement housing.

Homeowners who have owned and occupied their property for 180 days prior to the date of the first written offer to purchase the property, may qualify to receive a price differential payment equal to the difference between Caltrans's offer to purchase their property and the price of a comparable replacement dwelling, and may qualify to receive reimbursement for certain nonrecurring costs incidental to the purchase of the replacement property. An interest differential payment is also available if the interest rate for the loan on the replacement dwelling is higher than the loan rate on the displacement dwelling, subject to certain limitations on reimbursement based upon the replacement property interest rate. Also the interest differential must be based upon the "lesser of" either the loan on the displacement property or the loan on the replacement property. The maximum combination of these three supplemental payments that the owner-occupants can receive is $22,500. If the calculated total entitlement (without the moving payments) is in excess of $22,500, the displacee may qualify for the Last Resort Housing described below.

Rental Supplement

Tenants who have occupied the property to be acquired by Caltrans for 90 days or more and owner-occupants who have occupied the property 90 to 180 days prior to the date of the first written offer to purchase may qualify to receive a rental differential payment. This payment is made when Caltrans determines that the cost to rent a comparable and "decent, safe and sanitary" replacement dwelling will be more than the present rent of the displacement dwelling. As an alternative, the eligible occupant may qualify for a down payment benefit designed to assist in the purchase of a replacement property and the payment of certain costs incidental to the purchase, subject to certain limitation noted below under the "Down Payment" section (see below). The maximum amount of payment to any tenant of 90 days or more and any owner-occupant of 90 to 179 days, in addition to moving expenses, will be $5,250. If

the calculated total entitlement for rental supplement exceeds $5,250, the displacee may qualify for the Last Resort Housing Program described below.

The rental supplement of $7,500 or less will be paid in a lump sum, unless the displacee requests that it be paid in installments. The displaced person must rent and occupy a "decent, safe and sanitary" replacement dwelling within one year from the date Caltrans takes legal possession of the property, or from the date the displacee vacates the Caltrans-acquired property, whichever is later.

Down Payment

Displacees eligible to receive a rental differential payment may elect to apply it to a down payment for the purchase of a comparable replacement dwelling. The down payment and incidental expenses cannot exceed the maximum payment of $5,250, unless the Last Resort Housing Program is indicated. The one-year eligibility period in which to purchase and occupy a "decent, safe and sanitary" replacement dwelling will apply.

Last Resort Housing

Federal regulations (49 CFR 24.404) contain the policy and procedure for implementing the Last Resort Housing Program on federal aid projects. In order to maintain uniformity in the program, Caltrans has also adopted these federal guidelines on non-federal-aid projects. Except for the amounts of payments and the methods in making them, last resort housing benefits are the same as those benefits for standard relocation as explained above. Last resort housing has been designed primarily to cover situations where available comparable replacement housing, or when their anticipated replacement housing payments, exceed the $2,520 and $22,500 limits of the standard relocation procedures. In certain exceptional situations, last resort housing may also be used for tenants of less than 90 days.

After the first written offer to acquire the property has been made, Caltrans will, within a reasonable length of time, personally contact the displacees to gather important information relating to:

- Preferences in area of relocation.
- Number of people to be displaced and the distribution of adults and children according to age and sex.
- Location of school and employment.

- Special arrangements to accommodate any handicapped member of the family.
- Financial ability to relocate into comparable replacement dwelling, which will house all members of the family decently.

The above explanation is general in nature and is not intended to be a complete explanation of relocation regulations. Any questions concerning relocation should be addressed to Caltrans. Any persons to be displaced will be assigned a relocation advisor who will work closely with each displacee in order to see that all payments and benefits are fully used, and that all regulations are observed, thereby avoiding the possibility of displacees jeopardizing or forfeiting any of their benefits or payments.

THE BUSINESS AND FARM RELOCATION ASSISTANCE PROGRAM

The Business and Farm Relocation Assistance Program provides aid in locating suitable replacement property for the displacee's farm or business, including, when requested, a current list of properties offered for sale or rent. In addition, certain types of payments are available to businesses, farms, and non-profit organizations. These payments may be summarized as follows:

- Reimbursement for the actual direct loss of tangible personal property incurred as a result of moving or discontinuing the business in an amount not greater than the reasonable cost of relocating the property.
- Reimbursement up to $1,000 of actual reasonable expenses in searching for a new business site.
- Reimbursement up to $10,000 of actual reasonable expenses related to the reestablishment of the business at the new location
- Reimbursement of the actual reasonable cost of moving inventory, machinery, office equipment and similar business-related personal property, including dismantling, disconnecting, crating, packing, loading, insuring, transporting, unloading, unpacking, and reconnecting personal property.

Payment "in lieu" of moving expense is available to businesses that are expected to suffer a substantial loss of existing patronage as a result of the displacement, or if certain other requirements such as inability to find a suitable relocation site are met. This payment is an amount equal to the average annual net earnings for the last two taxable years prior to relocation. Such payment may not be less than $1,000 and not more than $20,000.

ADDITIONAL INFORMATION

No relocation payment received will be considered as income for the purpose of the Internal Revenue Code of 1954 or for the purposes of determining eligibility or the extent of eligibility of any person for assistance under the Social Security Act or any other federal law (except for any federal law providing low-income housing assistance).

Persons who are eligible for relocation payments and who are legally occupying the property required for the project will not be asked to move without being given at least 90 days advance notice, in writing. Occupants of any type of dwelling eligible for relocation payments will not be required to move unless at least one comparable "decent, safe and sanitary" replacement residence, open to all persons regardless of race, color, religion, sex or national origin, is available or has been made available to them by the state.

Any person, business, farm or non-profit organization, which has been refused a relocation payment by Caltrans, or believes that the payments are inadequate, may appeal for a hearing before a hearing officer or Caltrans' Relocation Assistance Appeals Board. No legal assistance is required; however, the displacee may choose to obtain legal council at his/her expense. Information about the appeal procedure is available from Caltrans' Relocation Advisors.

The information above is not intended to be a complete statement of all of Caltrans' laws and regulations. At the time of the first written offer to purchase, owner-occupants are given a more detailed explanation of the state's relocation services. Tenant occupants of properties to be acquired are contacted immediately after the first written offer to purchase, and also given a more detailed explanation of Caltrans' relocation programs.

IMPORTANT NOTICE

To avoid loss of possible benefits, no individual, family, business, farm or non-profit organization should commit to purchase or rent a replacement property without first contacting a Department of Transportation relocation advisor at:

State of California
Department of Transportation, District 06
Relocation Assistance Program
Tower Building, 855 M St, 3rd Floor
Fresno, CA 93721

Appendix E Minimization and/or Mitigation Summary

Public Parks

The following avoidance and or mitigation measures are recommended to avoid or offset any impacts to Joe Herb Park:

1. Avoid affecting any structures or equipment existing in the park.
2. Construct Americans with Disabilities Act-compliant pedestrian pathways connecting facilities/parking to create a better flow through the park.
3. Replace all removed parking stalls in kind, including creation of four new Americans with Disabilities Act-compliant stalls.
4. Replant all areas previously containing paved surfaces with grass and intermittent trees and shrubs.
5. All trees and/or shrubs requiring removal for construction activities would be replaced in kind with species approved by the City of Merced and Caltrans, and in keeping with the surrounding ambience of the park.

Relocations

Any person (individual, family, corporation, partnership, or association) who moves from real property or moves personal property from real property as a result of the acquisition of the real property, or is required to relocate as a result of a written notice from the California Department of Transportation from the real property required for a transportation project, is eligible for "Relocation Assistance." All activities would be conducted in accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended (see Appendix D).

Visual

Mitigation planting would begin immediately following the completion of the roadway construction project. A variety of trees and shrubs, similar to what currently exists in the park, would be planted to mitigate the visual impacts.

Historic Resources

The removal of Bradley Overhead Bridge would be mitigated through documentation. A Historic American Buildings Survey/Historic American Engineering Record would be sent to the National Park Service to determine what type and level of documentation is appropriate for the Bradley Overhead Bridge. Caltrans would

ensure that all documentation be completed and accepted by the Historic American Buildings Survey/Historic American Engineering Record before the start of project construction and that copies of documentation be made available to the State Historic Preservation Officer and appropriate local archives designated by the State Historic Preservation Officer.

Floodplains

Two drainage basins proposed for this project are sized to accept storage from two 10-year, 24-hour storms. The basins would accept the drainage from the high points on the bridge.

Storm Water

The Caltrans Statewide National Pollutant Discharge Elimination System Permit No. CAS000003 (SWRCB No. 99-06-DWQ) covers the proposed project.

During the construction phase, the contractor has the responsibility as stated in the Caltrans Standard Specifications Section 7-1.01G, for submitting a comprehensive plan outlining steps to eliminate potential impacts during construction. The plan must address and delineate in detail how the contractor intends to alleviate potential impacts to water quality during construction. For this project, the Storm Water Prevention Plan mentioned in this section would satisfy this requirement.

Hazardous Waste

Aerially Deposited Lead

In Area 1 (between Anderegg Avenue and Baker Drive), soil generated from the top 0.3 meter (1 foot) would be considered California hazardous waste if disposed of. Soil generated from the top 0.45 meter or top 0.6 meter (1.5 feet or 2 feet) would be considered non-hazardous and could be reused or relinquished without restriction.

In Area 3 (Santa Fe Avenue), the top 0.3 meter (1 foot) of soil should be disposed of as California hazardous waste. Soils excavated from the top to 0.45 meter and 0.6 meter (1.5 feet and 2 feet) would be considered non-hazardous for disposal or could be reused or relinquished without restriction.

Lead-based Paint

For lead-based paint, soils excavated to a maximum depth of 0.9 meter (3 feet) would likely be classified as non-hazardous. In Area 1, soils can be reused on-site and/or disposed of without restrictions.

Asbestos

Asbestos was found in the gasket material (sheet packing) on the Bradley Overhead Bridge. The asbestos was classified as non-friable, Category 2 material in fair condition. This material would require removal and disposal by a licensed and certified asbestos abatement contractor before the bridge could be demolished.

Air Quality

Caltrans Standard Specifications, Section 7-1.01F of "Air Pollution Control" and Section 10, "Dust Control," require the contractor to comply with regulations established by the San Joaquin Valley Unified Air Pollution Control District to reduce dust emissions during construction.

Noise

Noise abatement measures were considered for Receptor 8, which represents the first row of homes in the Sierra Portal Mobile Home Park. A soundwall is recommended to be placed on top of a safety shape barrier on the Bradley Overhead Bridge.

Special Concern Species

Pre-construction surveys in appropriate habitats would be conducted to identify the presence of any listed threatened and endangered species or important habitat for listed species. Designated staging areas for equipment storage, vehicle parking, and other project-related activities within the biological study area would be pre-approved by a Caltrans regional biologist.

San Joaquin Kit Fox

Caltrans would (1) conduct pre-construction surveys prior to ground disturbance to search for San Joaquin kit fox dens within the impact area; (2) conduct a meeting and training on the San Joaquin kit fox for construction personnel prior to groundbreaking activities; (3) adhere to contract special provisions during construction; and (4) conduct construction activities during daytime hours to avoid potential disruption of San Joaquin kit fox nocturnal activities.

Caltrans would purchase credits equivalent to 1.13 hectares (2.78 acres) of habitat suitable for the San Joaquin kit fox that have been approved by the U.S. Fish and Wildlife Service.

Special Provisions

In addition, the following *Special Provisions* would be implemented before and/or during construction of this project and are available for review at: California Department of Transportation, 1352 W. Olive Avenue, Fresno, CA:

- *Archaeology Special Provisions* in regards to the discovery of artifacts and/or human remains during construction.
- *General Migratory Bird Treaty Act Special Provisions* in regards to the protection of migratory birds, their occupied nests, and their eggs from disturbance or destruction. If construction occurs during the spring and summer months (March 1 through September 1), pre-construction nest site surveys would be required for nesting birds. In addition, if nests were observed, construction associated with the removal of trees would be postponed until September 1. To prevent potential construction delays, it is recommended that trees be removed outside of the nesting season.
- *Swallow Contract Provisions* in regards to the avoidance of conflicts between performing necessary work and nesting swallows.
- *San Joaquin Kit Fox Special Provisions* in regards to the avoidance of a "take" as defined by law.

Appendix F U.S. Fish and Wildlife Service Species List

ENCLOSURE A
Endangered and Threatened Species that May Occur in
or be Affected by Projects in the Selected Quads Listed Below
01-SP-2377 Update of 00-SP-2140
June 15, 2001

QUAD : 421C MERCED

Listed Species

Mammals

San Joaquin kit fox, *Vulpes macrotis mutica* (E)

Birds

bald eagle, *Haliaeetus leucocephalus* (T)

Reptiles

blunt-nosed leopard lizard, *Gambelia (=Crotaphytus) sila* (E)

giant garter snake, *Thamnophis gigas* (T)

Amphibians

California red-legged frog, *Rana aurora draytonii* (T)

Fish

delta smelt, *Hypomesus transpacificus* (T)

Central Valley steelhead, *Oncorhynchus mykiss* (T)

winter-run chinook salmon, *Oncorhynchus tshawytscha* (E)

Central Valley spring-run chinook salmon, *Oncorhynchus tshawytscha* (T)

Sacramento splittail, *Pogonichthys macrolepidotus* (T)

Invertebrates

Conservancy fairy shrimp, *Branchinecta conservatio* (E)

vernal pool fairy shrimp, *Branchinecta lynchi* (T)

valley elderberry longhorn beetle, *Desmocerus californicus dimorphus* (T)

vernal pool tadpole shrimp, *Lepidurus packardi* (E)

Plants

Colusa grass, *Neostapfia colusana* (T)

hairy Orcutt grass, *Orcuttia pilosa* (E)

Proposed Species

Birds

mountain plover, *Charadrius montanus* (PT)

Candidate Species

Amphibians

California tiger salamander, *Ambystoma californiense* (C)

Fish

Central Valley fall/late fall-run chinook salmon, *Oncorhynchus tshawytscha* (C)

Species of Concern

Mammals

San Joaquin (=Nelson's) antelope squirrel, *Ammospermophilus nelsoni* (CA)

Pacific western big-eared bat, *Corynorhinus (=Plecotus) townsendii townsendii* (SC)

Merced kangaroo rat, *Dipodomys heermanni dixoni* (SC)

greater western mastiff-bat, *Eumops perotis californicus* (SC)

small-footed myotis bat, *Myotis ciliolabrum* (SC)

long-eared myotis bat, *Myotis evotis* (SC)

fringed myotis bat, *Myotis thysanodes* (SC)

long-legged myotis bat, *Myotis volans* (SC)

Yuma myotis bat, *Myotis yumanensis* (SC)

San Joaquin pocket mouse, *Perognathus inornatus* (SC)

Birds

tricolored blackbird, *Agelaius tricolor* (SC)

western burrowing owl, *Athene cunicularia hypugea* (SC)

Aleutian Canada goose, *Branta canadensis leucopareia* (D)

ferruginous hawk, *Buteo regalis* (SC)

little willow flycatcher, *Empidonax traillii brewsteri* (CA)

white-faced ibis, *Plegadis chihi* (SC)

Reptiles

northwestern pond turtle, *Clemmys marmorata marmorata* (SC)

southwestern pond turtle, *Clemmys marmorata pallida* (SC)

California horned lizard, *Phrynosoma coronatum frontale* (SC)

Amphibians

western spadefoot toad, *Scaphiopus hammondii* (SC)

Fish

green sturgeon, *Acipenser medirostris* (SC)

river lamprey, *Lampetra ayresi* (SC)

Pacific lamprey, *Lampetra tridentata* (SC)

longfin smelt, *Spirinchus thaleichthys* (SC)

Invertebrates

California linderiella fairy shrimp, *Linderiella occidentalis* (SC)

molestan blister beetle, *Lytta molesta* (SC)

Plants

Merced phacelia, *Phacelia ciliata var. opaca* (SC)

valley sagittaria, *Sagittaria sanfordii* (SC)

KEY:

(E)	*Endangered*	Listed (in the Federal Register) as being in danger of extinction.
(T)	*Threatened*	Listed as likely to become endangered within the foreseeable future.
(P)	*Proposed*	Officially proposed (in the Federal Register) for listing as endangered or threatened.
(PX)	*Proposed Critical Habitat*	Proposed as an area essential to the conservation of the species.
(C)	*Candidate*	Candidate to become a *proposed* species.
(SC)	*Species of Concern*	May be endangered or threatened. Not enough biological information has been gathered to support listing at this time.
(MB)	*Migratory Bird*	Migratory bird
(D)	*Delisted*	Delisted. Status to be monitored for 5 years.
(CA)	*State-Listed*	Listed as threatened or endangered by the State of California.
(*)	*Extirpated*	Possibly extirpated from this quad.
(**)	*Extinct*	Possibly extinct.
	Critical Habitat	Area essential to the conservation of a species.

Endangered and Threatened Species that May Occur in or be Affected by
PROJECTS IN MERCED COUNTY
Reference File No. 01-SP-2377 Update of 00-SP-2140
June 15, 2001

Listed Species

Mammals

- giant kangaroo rat, *Dipodomys ingens* (E)
- Fresno kangaroo rat, *Dipodomys nitratoides exilis* (E)
- San Joaquin kit fox, *Vulpes macrotis mutica* (E)
- riparian (San Joaquin Valley) woodrat, *Neotoma fuscipes riparia* (E) *
- riparian brush rabbit, *Sylvilagus bachmani riparius* (E) *

Birds

- bald eagle, *Haliaeetus leucocephalus* (T)

Reptiles

- blunt-nosed leopard lizard, *Gambelia (=Crotaphytus) sila* (E)
- giant garter snake, *Thamnophis gigas* (T)

Amphibians

- California red-legged frog, *Rana aurora draytonii* (T)

Fish

- delta smelt, *Hypomesus transpacificus* (T)
- Central Valley steelhead, *Oncorhynchus mykiss* (T)
- Sacramento splittail, *Pogonichthys macrolepidotus* (T)

Invertebrates

- Conservancy fairy shrimp, *Branchinecta conservatio* (E)
- longhorn fairy shrimp, *Branchinecta longiantenna* (E)
- vernal pool tadpole shrimp, *Lepidurus packardi* (E)
- vernal pool fairy shrimp, *Branchinecta lynchi* (T)
- valley elderberry longhorn beetle, *Desmocerus californicus dimorphus* (T)

Plants

- hairy Orcutt grass, *Orcuttia pilosa* (E)
- Greene's tuctoria, *Tuctoria greenei* (E)
- fleshy owl's-clover, *Castilleja campestris ssp. succulenta* (T)
- Hoover's spurge, *Chamaesyce hooveri* (T)
- Colusa grass, *Neostapfia colusana* (T)
- San Joaquin Valley Orcutt grass, *Orcuttia inaequalis* (T)

Proposed Species

Birds

mountain plover, *Charadrius montanus* (PT)

Candidate Species

Amphibians

California tiger salamander, *Ambystoma californiense* (C)

Fish

Central Valley fall/late fall-run chinook salmon, *Oncorhynchus tshawytscha* (C)

Species of Concern

Mammals

San Joaquin (=Nelson's) antelope squirrel, *Ammospermophilus nelsoni* (CA)
pale Townsend's big-eared bat, *Corynorhinus (=Plecotus) townsendii pallescens* (SC)
Pacific western big-eared bat, *Corynorhinus (=Plecotus) townsendii townsendii* (SC)
Merced kangaroo rat, *Dipodomys heermanni dixoni* (SC)
short-nosed kangaroo rat, *Dipodomys nitratoides brevinasus* (SC)
spotted bat, *Euderma maculatum* (SC)
greater western mastiff-bat, *Eumops perotis californicus* (SC)
small-footed myotis bat, *Myotis ciliolabrum* (SC)
long-eared myotis bat, *Myotis evotis* (SC)
fringed myotis bat, *Myotis thysanodes* (SC)
long-legged myotis bat, *Myotis volans* (SC)
Yuma myotis bat, *Myotis yumanensis* (SC)
San Joaquin pocket mouse, *Perognathus inornatus* (SC)

Birds

Swainson's hawk, *Buteo Swainsoni* (CA)
little willow flycatcher, *Empidonax traillii brewsteri* (CA)
greater sandhill crane, *Grus canadensis tabida* (CA)
bank swallow, *Riparia riparia* (CA)
Aleutian Canada goose, *Branta canadensis leucopareia* (D)
American peregrine falcon, *Falco peregrinus anatum* (D)
Black-Crowned Night Heron, *Nycticorax nycticorax* (MB)
tricolored blackbird, *Agelaius tricolor* (SC)
grasshopper sparrow, *Ammodramus savannarum* (SC)
Bell's sage sparrow, *Amphispiza belli belli* (SC)
short-eared owl, *Asio flammeus* (SC)
western burrowing owl, *Athene cunicularia hypugea* (SC)

American bittern, *Botaurus lentiginosus* (SC)
ferruginous hawk, *Buteo regalis* (SC)
Costa's hummingbird, *Calypte costae* (SC)
Lawrence's goldfinch, *Carduelis lawrencei* (SC)
Vaux's swift, *Chaetura vauxi* (SC)
black tern, *Chlidonias niger* (SC)
lark sparrow, *Chondestes grammacus* (SC)
olive-sided flycatcher, *Contopus cooperi* (SC)
hermit warbler, *Dendroica occidentalis* (SC)
white-tailed (=black shouldered) kite, *Elanus leucurus* (SC)
Pacific-slope flycatcher, *Empidonax difficilis* (SC)
least bittern, western, *Ixobrychus exilis hesperis* (SC)
loggerhead shrike, *Lanius ludovicianus* (SC)
Lewis' woodpecker, *Melanerpes lewis* (SC)
long-billed curlew, *Numenius americanus* (SC)
white-faced ibis, *Plegadis chihi* (SC)
rufous hummingbird, *Selasphorus rufus* (SC)
Brewer's sparrow, *Spizella breweri* (SC)
Bewick's wren, *Thryomanes bewickii* (SC)

Reptiles

silvery legless lizard, *Anniella pulchra pulchra* (SC)
northwestern pond turtle, *Clemmys marmorata marmorata* (SC)
southwestern pond turtle, *Clemmys marmorata pallida* (SC)
San Joaquin coachwhip (=whipsnake), *Masticophis flagellum ruddocki* (SC)
California horned lizard, *Phrynosoma coronatum frontale* (SC)

Amphibians

foothill yellow-legged frog, *Rana boylii* (SC)
western spadefoot toad, *Scaphiopus hammondii* (SC)

Fish

green sturgeon, *Acipenser medirostris* (SC)
river lamprey, *Lampetra ayresi* (SC)
Kern brook lamprey, *Lampetra hubbsi* (SC)
Pacific lamprey, *Lampetra tridentata* (SC)
longfin smelt, *Spirinchus thaleichthys* (SC)

Invertebrates

Ciervo aegialian scarab beetle, *Aegialia concinna* (SC)
Midvalley fairy shrimp, *Branchinecta mesovallensis* (SC)

San Joaquin dune beetle, *Coelus gracilis* (SC)
California linderiella fairy shrimp, *Linderiella occidentalis* (SC)
molestan blister beetle, *Lytta molesta* (SC)

Plants

delta coyote-thistle (=button-celery), *Eryngium racemosum* (CA)
alkali milk-vetch, *Astragalus tener var. tener* (SC)
heartscale, *Atriplex cordulata* (SC)
brittlescale, *Atriplex depressa* (SC)
valley spearscale, *Atriplex joaquiniana* (SC)
vernal pool saltbush, *Atriplex persistens* (SC)
Lost Hills saltbush, *Atriplex vallicola* (SC)
Hoover's rosinweed, *Calycadenia hooveri* (SC)
beaked clarkia, *Clarkia rostrata* (SC)
hispid bird's-beak, *Cordylanthus mollis ssp. hispidus* (SC)
recurved larkspur, *Delphinium recurvatum* (SC)
hollisteria, *Hollisteria lanata* (SC)
pincushion navarretia, *Naverretia myersii spp. myersii* (SC)
Merced phacelia, *Phacelia ciliata var. opaca* (SC)
valley sagittaria, *Sagittaria sanfordii* (SC)
Arburua Ranch jewelflower, *Streptanthus insignis ssp. lyonii* (SC)
lesser saltscale, *Atriplex minuscula* (SC) *
Merced monardella, *Monardella leucocephala* (SC) **

KEY:

(E)	*Endangered*	Listed (in the Federal Register) as being in danger of extinction.
(T)	*Threatened*	Listed as likely to become endangered within the foreseeable future.
(P)	*Proposed*	Officially proposed (in the Federal Register) for listing as endangered or threatened.
(PX)	*Proposed Critical Habitat*	Proposed as an area essential to the conservation of the species.
(C)	*Candidate*	Candidate to become a *proposed* species.
(SC)	*Species of Concern*	Other species of concern to the Service.
(D)	*Delisted*	Delisted. Status to be monitored for 5 years.
(CA)	*State-Listed*	Listed as threatened or endangered by the State of California.
*	*Extirpated*	Possibly extirpated from the area.
**	*Extinct*	Possibly extinct
	Critical Habitat	Area essential to the conservation of a species.

Federal Endangered and Threatened Species that may be Affected by Projects in the MERCED 7 1/2 Minute Quad

Database Last Updated: June 5, 2003

Today's Date is: July 17, 2003

Listed Species

Invertebrates

Branchinecta conservatio - Conservancy fairy shrimp (E)

Branchinecta lynchi - vernal pool fairy shrimp (T)

Desmocerus californicus dimorphus - valley elderberry longhorn beetle (T)

Lepidurus packardi - vernal pool tadpole shrimp (E)

Fish

Hypomesus transpacificus - delta smelt (T)

Oncorhynchus mykiss - Central Valley steelhead (T) (NMFS)

Oncorhynchus tshawytscha - Central Valley spring-run chinook salmon (T) (NMFS)

Pogonichthys macrolepidotus - Sacramento splittail (T)

Amphibians

Rana aurora draytonii - California red-legged frog (T)

Reptiles

Gambelia (=Crotaphytus) sila - blunt-nosed leopard lizard (E)

Thamnophis gigas - giant garter snake (T)

Birds

Haliaeetus leucocephalus - bald eagle (T)

Mammals

Vulpes macrotis mutica - San Joaquin kit fox (E)

Plants

Castilleja campestris ssp. succulenta - succulent (=fleshy) owl's-clover (T)

Neostapfia colusana - Colusa grass (T)

Orcuttia pilosa - hairy Orcutt grass (E)

Proposed Species

Amphibians

Ambystoma californiense - California tiger salamander (PT)

Birds

Charadrius montanus - mountain plover (PT)

Candidate Species

Fish

Acipenser medirostris - green sturgeon (C)

Oncorhynchus tshawytscha - Central Valley fall/late fall-run chinook salmon (C) (NMFS)

Species of Concern

Invertebrates

Branchinecta mesovallensis - Midvalley fairy shrimp (SC)

Linderiella occidentalis - California linderiella fairy shrimp (SC)

Lytta molesta - molestan blister beetle (SC)

Fish

Lampetra ayresi - river lamprey (SC)

Lampetra tridentata - Pacific lamprey (SC)

Spirinchus thaleichthys - longfin smelt (SC)

Amphibians

Spea hammondii - western spadefoot toad (SC)

Reptiles

Clemmys marmorata marmorata - northwestern pond turtle (SC)

Clemmys marmorata pallida - southwestern pond turtle (SC)

Phrynosoma coronatum frontale - California horned lizard (SC)

Birds

Agelaius tricolor - tricolored blackbird (SC)

Athene cunicularia hypugaea - western burrowing owl (SC)

Branta canadensis leucopareia - Aleutian Canada goose (D)

Buteo regalis - ferruginous hawk (SC)

Buteo Swainsoni - Swainson's hawk (CA)

Calypte costae - Costa's hummingbird (SC)

Carduelis lawrencei - Lawrence's goldfinch (SC)

Chaetura vauxi - Vaux's swift (SC)

Elanus leucurus - white-tailed (=black shouldered) kite (SC)

Empidonax traillii brewsteri - little willow flycatcher (CA)

Grus canadensis tabida - greater sandhill crane (CA)

Lanius ludovicianus - loggerhead shrike (SC)

Melanerpes lewis - Lewis' woodpecker (SC)

Numenius americanus - long-billed curlew (SC)

Picoides nuttallii - Nuttall's woodpecker (SLC)

Plegadis chihi - white-faced ibis (SC)

Selasphorus rufus - rufous hummingbird (SC)

Mammals

Ammospermophilus nelsoni - San Joaquin (=Nelson's) antelope squirrel (CA)

Corynorhinus (=Plecotus) townsendii townsendii - Pacific western big-eared bat (SC)

Dipodomys heermanni dixoni - Merced kangaroo rat (SC)

Eumops perotis californicus - greater western mastiff-bat (SC)

Myotis ciliolabrum - small-footed myotis bat (SC)

Myotis volans - long-legged myotis bat (SC)

Myotis yumanensis - Yuma myotis bat (SC)

Perognathus inornatus - San Joaquin pocket mouse (SC)

Plants

Phacelia ciliata var. opaca - Merced phacelia (SC)

Sagittaria sanfordii - valley sagittaria (=Sanford's arrowhead) (SC)

Species with Critical Habitat Proposed or Designated in this Quad

vernal pool invertebrates (PX)

vernal pool plants (PX)

Key:

(E) Endangered - Listed (in the Federal Register) as being in danger of extinction.

(T) Threatened - Listed as likely to become endangered within the foreseeable future.

(P) Proposed - Officially proposed (in the Federal Register) for listing as endangered or threatened.

(NMFS) Species under the Jurisdiction of the National Marine Fisheries Service. Consult with them directly about these species.

Critical Habitat - Area essential to the conservation of a species.

(PX) Proposed Critical Habitat - The species is already listed. Critical habitat is being proposed for it.

(C) Candidate - Candidate to become a proposed species.

(CA) Listed by the State of California but not by the Fish & Wildlife Service.

(D) Delisted - Species will be monitored for 5 years.

(SC) Species of Concern/(SLC) Species of Local Concern - Other species of concern to the Sacramento Fish & Wildlife Office.

Our database was developed primarily to assist Federal agencies that are consulting with us. Therefore, our lists include all of the sensitive species that have been found in a certain area *and also ones that may be affected by projects in the area.* For example, a fish may be on the list for a quad if it lives somewhere downstream from that quad. Birds are included even if they only migrate through an area. In other words, we include all of the species we want people to consider when they do something that affects the environment.

This is *not* an official list for formal consultation under the Endangered Species Act. *However, it may be used to update official lists.*

If you have a project that may affect endangered species, please contact the Endangered Species Division, Sacramento Fish and Wildlife Office, U.S. Fish and Wildlife Service.

Appendix G State Historic Preservation Officer Concurrence Letter

P-38135 Bream/Stone

STATE OF CALIFORNIA – THE RESOURCES AGENCY GRAY DAVIS, *Governor*

OFFICE OF HISTORIC PRESERVATION
DEPARTMENT OF PARKS AND RECREATION
P.O. BOX 942896
SACRAMENTO, CA 94296-0001
(916) 653-6624 Fax: (916) 653-9824
calshpo@mail2.quiknet.com

December 18, 2001

REPLY TO: FHWA010924C

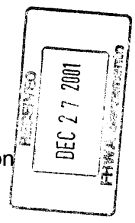
Michael G. Ritchie, Division Administrator
Federal Highway Administration
Region Nine, California Division
980 Ninth Street, Suite 400
SACRAMENTO CA 95814-2724

Re: Bradley Street Overhead Replacement Project, State Route 140, Merced, Merced County.

Dear Mr. Ritchie:

Thank you for submitting to our office your September 18, 2001 letter and Historic Property Survey Report (HPSR) regarding the proposed replacement of the Bradley Overhead (Bridge No. 39-44), a structure located on State Route (SR) 140 in the City of Merced in Merced County. The Bradley Overhead was constructed circa 1931-32. The proposed project will involve the construction of a new bridge to replace the Bradley Overhead. The existing structure has no shoulders or sidewalks, and restricted sight distances. SR 140 will be widened on both sides of the Bradley Overhead to provide continuity between the existing four-lane highway and the proposed four-lane bridge. The project will also include the realignment and signalization of two intersections, located at East 21st Street, Baker Drive, and Santa Fe Avenue. A third intersection at east 21st Street would also be aligned to avoid a need for a design exception. The Area of Potential Effects (APE) for this project, as described in the HPSR, appears adequate and meets the guidelines set forth in 36 CFR 800.16(d). An archeological record search conducted at the Central California Information Center at California State University Stanislaus identified no known archeological properties in the project area. Pedestrian surveys of the project area by qualified archeologists on July 2000, February 2001, and May 2001 identified no known significant archeological properties.

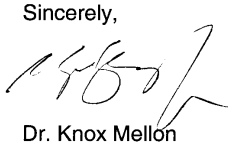
The Federal Highway Administration (FHWA) is seeking our comments on its determination of the eligibility of fifteen (15) pre-1955 architectural and structural properties located within the project APE for inclusion on the National Register of Historic Places (NRHP) in accordance with 36 CFR 800, regulations implementing Section 106 of the National Historic Preservation Act. Another 49 properties were treated in accordance with December 1989 *"Memorandum of Understanding (MOU) Regarding Evaluation of Post-1945 Buildings, Moved Pre-1945 Buildings and Altered Pre-1945 Buildings"* and the "Interim guidelines – Post 1945" MOU (July 1997). Our review of the submitted documentation leads us to concur with FHWA's determination that the Bradley Overhead is eligible for inclusion on the NRHP under Criteria A and C as defined in 36 CFR 60.4. The structure has strong associations with the construction and development of the All Year Highway, one of the main arterial roadways leading into Yosemite National Park. In addition, the structure has retained sufficient integrity



of design, materials, setting, and workmanship that contribute to its significance as California's first major arc-welded highway bridge. The steel girder design of the lower structure reflects the innovative use of steel materials of structures of its type during the Great Depression. The Bradley Overhead is the last major highway bridge structure of its type in the state. We also concur with FHWA's determination that the remaining structures evaluated in the HPSR are not eligible for inclusion on the NRHP under any of the criteria established by 36 CFR 60.4. The properties have no strong associations with significant historical events or persons and are not examples of outstanding architectural or engineering design and/or function.

Thank you again for seeking our comments on your project. If you have any questions, please contact staff historian Clarence Caesar at (916) 653-8902.

Sincerely,



Dr. Knox Mellon
State Historic Preservation Officer

Appendix H Memorandum of Agreement between FHWA, SHPO and Caltrans

MEMORANDUM OF AGREEMENT
BETWEEN THE FEDERAL HIGHWAY ADMINISTRATION AND
THE CALIFORNIA STATE HISTORIC PRESERVATION OFFICER
REGARDING REPLACEMENT OF THE BRADLEY OVERHEAD,
MERCED COUNTY, CALIFORNIA

WHEREAS, the Federal Highway Administration (FHWA) has found that the Bradley Overhead Replacement Project (Undertaking) on State Route 140 in Merced County, California, will have an adverse effect on the Bradley Overhead, a property determined by consensus to be eligible for inclusion in the National Register of Historic Places (National Register), and has consulted with the California State Historic Preservation Officer (SHPO) and notified the Advisory Council on Historic Preservation (ACHP) of the effect finding pursuant to 36 CFR Part 800, regulations effective January 11, 2001 and amended August 5, 2004, implementing Section 106 of the National Historic Preservation Act (16 USC 470f), as amended (NHPA); and

WHEREAS the California Department of Transportation (Caltrans) participated in the consultation and has been invited to concur in this Memorandum of Agreement (MOA);

NOW, THEREFORE, FHWA and the SHPO agree that the undertaking shall be implemented in accordance with the following stipulations in order to take into account the effects of the undertaking on historic properties, and that these stipulations shall govern the undertaking and all of its parts until this MOA expires or is terminated.

STIPULATIONS

FHWA shall ensure that the following stipulations are implemented:

I. Recordation

Prior to the start of any work that could adversely affect any characteristics that qualify the Bradley Overhead Bridge as an historic property, Caltrans shall ensure that the recordation measures specified in this stipulation are completed.

A. Photography and Construction Drawings

1. Large-format ((4" x 5") or larger negative size) black and white photographs showing the bridge in context as well as details of its historic engineering features. Photographs shall be processed for archival permanence in accordance with the HAER photographic specifications. Views of the bridge shall include:

   • Contextual views showing the bridge in its setting,

   • Elevation views,

   • Views of the bridge approaches and abutments, and

   • Detail views of significant engineering and design elements.

2. Caltrans shall reproduce plans, elevations, and selected details from the original construction drawings for the Bradley Overhead, if these are available, in 8 ½" by 11" format, for inclusion in the report cited in stipulation I.B.

B. Written Documentation following the NPS *HAER Guidelines for Preparing Written Historical and Descriptive Data*, September 1993.

A written historical and descriptive report for the bridge will be completed. This report will provide a physical description of the bridge, discuss its construction and its significance under applicable NRHP criteria and address the historical context for its construction, purposes and function following the format and instructions in the above-referenced HAER guidelines for written documentation.

C. Document Distribution

Copies of the documentation prescribed in this stipulation shall upon completion be retained by Caltrans Districts 06 & 10, deposited in the Caltrans Transportation Library and History Center at Caltrans Headquarters in Sacramento, and also be provided to local historical societies (e.g., in Fresno and Merced County) and to the Central California Information Center of the California

Historical Resources Information System at California State University, Stanislaus and to other interested parties upon request.

II. Administrative Provisions

A. Professional Qualifications Standards

FHWA shall ensure that actions prescribed by stipulation I., and any actions necessitated pursuant to stipulation II.B., are carried out by or under the direct supervision of a person or persons meeting at a minimum the *Secretary of the Interior's Standards & Guidelines: Professional Qualifications Standards* (48 FR44738-44739) in the appropriate disciplines.

B. Unanticipated Discoveries

If FHWA determines after construction has commenced that the undertaking will affect a previously unidentified property that may be eligible for inclusion in the NRHP, FHWA will address the discovery in accordance with 36 CFR § 800.13(b)(3). FHWA may assume the discovered property to be eligible for the NRHP in accordance with 36 CFR § 800.13(c).

C. Resolving Objections

1. Should any party to this MOA object to the manner in which the terms of this MOA are implemented, to any action carried out or proposed with respect to implementation of the MOA or to any documentation prepared in accordance with and subject to the terms of this MOA, the FHWA shall immediately notify the other parties to this MOA of the objection, and consult with the objecting party and with the other parties to this MOA for no more than 30 days to resolve the objection. FHWA will honor the request of the other parties to participate in the consultation and will take any comments provided by those parties into account.

2. If the objection is resolved during the 30-day consultation period, the FHWA may proceed with the disputed action in accordance with the terms of such resolution.

3. If, after initiating such consultation, the FHWA determines that the objection cannot be resolved through consultation, the FHWA shall forward all documentation relevant to the objection to the ACHP, including the FHWA's proposed response to the objection, with the expectation that the ACHP will within thirty (30) days after receipt of such documentation:

a. Advise the FHWA that the ACHP concurs in the FHWA's proposed response to the objection, whereupon the FHWA will respond to the objection accordingly; or

b. Provide the FHWA with recommendations, which the FHWA will take into account in reaching a final decision regarding its response to the objection; or

c. Notify the FHWA that the objection will be referred for comment pursuant to applicable regulation, and proceed to refer the objection and comment. The FHWA shall take the resulting comment into account in accordance with applicable regulation and Section 110(l) of the NHPA.

4. Should the ACHP not exercise one of the foregoing options within 30 days after receipt of all pertinent documentation, the FHWA may assume the ACHP's concurrence in its proposed response to the objection.

5. The FHWA shall take into account any ACHP recommendation or comment and any comments from the parties to the MOA in reaching a final decision regarding the objection. The FHWA's responsibility to carry out all actions under this MOA that are not the subjects of the objection shall remain unchanged.

6. The FHWA shall provide all parties to this MOA and the ACHP if the ACHP has commented, with a copy of its final written decision regarding any objection addressed pursuant to this stipulation.

7. The FHWA may authorize any action subject to objection under this stipulation to proceed after the objection has been resolved in accordance with the terms of this stipulation.

8. At any time during implementation of the terms of this MOA, should a member of the public raise an objection pertaining to the manner of such implementation, the FHWA shall immediately notify the other MOA parties in writing of the objection and take the objection into consideration. The FHWA shall consult with the objecting party and, if the objecting party so requests, with the other parties to this MOA, for no more than 15 days. Within 15 days following closure of this consultation period, the FHWA will render a decision regarding the objection, and notify the other parties of its decision in writing. In reaching its decision, the FHWA will take all comments from the other parties into consideration. The FHWA's decision regarding resolution of the objection will be final.

D. Amendments

Any party to this MOA may propose that this MOA be amended, whereupon the signatory parties will consult for no more than 30 days to consider such amendment. The amendment process shall comply with 36 CFR § 800.6(c)(1) and 800.6(c)(7). This MOA may be amended only upon the written agreement of the signatory parties. If it is not amended, this MOA may be terminated by either signatory party in accordance with stipulation II.E.

E. Termination

1. If this MOA is not amended as provided for in stipulation II.D., or if either signatory party proposes termination of this MOA for other reasons, the signatory party proposing termination shall, in writing, notify the other parties to this MOA, explain the reasons for proposing termination, and consult with the other parties for at least 30 days to seek alternatives to termination. Should such consultation result in an agreement on an alternative to termination, then the parties shall amend this MOA accordingly, as provided for in stipulation II.D., and proceed pursuant to the terms of that amendment.

2. Should such consultation fail, the signatory party proposing termination may terminate this MOA by promptly notifying the other parties to this MOA in writing. Termination hereunder shall render this MOA without further force or effect.

3. If this MOA is terminated hereunder, and if the FHWA determines that the Undertaking will nonetheless proceed, then the FHWA shall either consult in accordance with 36 CFR § 800.6 to develop a new MOA or request the comments of the ACHP pursuant to 36 CFR Part 800.

F. Duration of the MOA

1. Unless terminated pursuant to stipulation II.E. or superseded by an amended MOA, this MOA will be in effect following execution by the signatory parties until the FHWA, in consultation with the other parties to this MOA, determines that all of its stipulations have been satisfactorily fulfilled. Upon a determination by FHWA that all of the terms of this MOA have been satisfactorily fulfilled, this MOA will terminate and have no further force or effect. FHWA will promptly provide the other parties to this MOA with written notice of its determination and of the termination of this MOA. Following provision of such notice, this MOA shall have no further force or effect.

2. The terms of this MOA shall be satisfactorily fulfilled within 5 years following the date of execution by the signatory parties. If the FHWA determines that this requirement cannot be met, the parties to this MOA will consult to reconsider its terms. Reconsideration may include continuation of the MOA as originally executed, amendment, or termination.

G. Effective Date of this MOA

A. This MOA will take effect immediately upon execution by both signatory parties.

EXECUTION of this MOA by the FHWA and the SHPO, its transmittal by the FHWA to the ACHP in accordance with 36 CFR § 800.6(b)(1)(iv), and subsequent implementation of its terms, shall evidence, pursuant to 36 CFR § 800.6(c), that this MOA is an agreement with the ACHP for purposes of Section 110(l) of the NHPA, and shall further evidence that the FHWA has afforded the ACHP an opportunity to comment on the Undertaking and its effects on historic properties, and that the FHWA has taken into account the effects of the Undertaking on historic properties.

SIGNATORY PARTIES:

FEDERAL HIGHWAY ADMINISTRATION

By: César E. Pérez Date: 5/2/05

Title: Team Leader. South Team

CALIFORNIA STATE HISTORIC PRESERVATION OFFICER

By: Stephen D. Mikesell Date: 6/13/05

Title: Deputy SHPO

CONCUR: CALIFORNIA DEPARTMENT OF TRANSPORTATION

By: Kome Ajise Date: 4/27/05

Title: DISTRICT 10 DIRECTOR

Appendix I List of Technical Studies

California Department of Transportation. Air Quality Report: Bradley Overhead Replacement, Reference No. EA 0G1300, December 2002, updated April 2005.

California Department of Transportation. Draft Relocation Impact Study, Reference No. EA 0G1300, December 2002.

California Department of Transportation. Hazardous Waste, Initial Site Assessment, Reference No. EA 0G1300, January 2002.

California Department of Transportation. Historic Architectural Survey Report/Historic Resource Evaluation Report, 2001.

California Department of Transportation. Initial Paleontology Study, Reference No. 0G1300, October 2002.

California Department of Transportation. Location Hydraulics Study, Reference No. EA 0G1300, September 2002.

California Department of Transportation. Natural Environmental Science Report, Reference No. EA 0G1300, March 2003, Updated April 2005.

California Department of Transportation. Noise Study Report, Reference No. 0G1300, December 2002, updated April 2005.

California Department of Transportation. Preliminary Geotechnical Report, Reference No. 0G1300, June 2002.

California Department of Transportation. Scenic Resource Evaluation, Reference No. 0G1300, January 2001. Revised Science Resource Evaluation, Reference No. 0G1300, March 2001 and Revisited SRE Memo December 26, 2002.

California Department of Transportation. Visual Impact Memo in regards to the replacement of the existing bridge, April 2005.

California Department of Transportation. Traffic Study, August 2002

California Department of Transportation. Water Quality Report, Reference No. 0G1300, January 2002.

Merced County Association of Governments Regional Transportation Plan, 1998.

County of Merced General Plan, *Merced 2000*. Adopted by the Board of Supervisors, December 1990.

Merced Vision 2015 General Plan. Adopted by Merced City Commission, March 1997. Adopted by Merced City Council, April 1997.

U.S. Department of Commerce, Bureau of the Census. 1990 Census, 1990.

U.S. Department of Commerce, Bureau of the Census. 2000 Census, 2000.